# ANNUAL PROGRESS REPORT OF KYK NANA-KANDHASAR (2008-09)

## 1. GENERAL INFORMATION ABOUT THE KVK:

1.1. Name and address of KVK with phone, fax and e-mail.

Address	Telepho	one	E-mail	
	Office	Fax		
Krishi Vigyan Kendra,	02751-		rmjavia@	
Junagadh Agricultural University	294120		gmail.com	
Nana-Kandhasar-363 520				
Dist: Surendranagar				

1.2 .Name and address of host organization with phone, fax and e-mail

Address	Telep	<b>E</b> -	
	Office	Fax	mail
Junagadh Agricultural University	0285-	0285-2672653	
Junagadh- 362 001	2672080-90		

1.3. Name of the Programme Coordinator with phone & mobile No

Name	Т	'elephone / Co	ntact
	Residence	Mobile	E-mail
Dr. R. M. Javia Programme Coordinator Krishi Vigyan Kendra, Junagadh Agricultural University Nanakandhasar-363 520 Dist: Surendranagar		094277 25505	rmjavia@ gmail.com

1.4. Year of sanction: October, 2005

# 1.5. Staff Position (as on 30th September 2009)

Sr. No	Sanctioned post	Name of the incumbent	Designa- tion	Discipline	Pay scale (Rs.)	Present Basic (Rs.)	Date of joining	P/T	Category (SC/ST/OBC/ Others)
1	Programme Coordinator 1	Dr. R. M. Javia	Programme Coordinato r	Plant Breeding & Genetics	8000- 13500	9925	22-8-2006	Т	Gen.
2	SMS	Mr. A.M. Bharadiya	SMS	Plant Protection	8000- 13500	8825	21-8-2006	Т	SC
3	6	Dr. B. C. Bochalya	SMS	Ext Edu.	8000- 13500	9925	23-8-2006	Т	Gen.
4		Miss B. M. Bhalala•	SMS	Home Science	8000- 13500	8000	23-8-2006	Т	Gen.
5		Dr. M. M. Tajapara	SMS	Animal Science	8000- 13500	8825	22-8-2006	Т	Gen.
6		Mr. H. M. Bhuva	SMS	Agronomy	8000- 13500	8825	30-8-2006	Т	Gen.
7		VACANT							
8	Training	G. K. Sapra	Tr. Asstt	PBG	4500 fix	4500 fix			
9	Assistant 2	VACANT							
10	Computer Programmer 1	P T Patel **	Computer Programmer	B.E. (Computer)	4500 fix	4500 fix	07-02-2008	Т	ST
11	Accountant / Superintendent 1	Mr. V. F. Chaudhari	O. S. cum Accountant		5000- 8000	5750	06-6-2007	Т	ST
12	Stenographer 1	VACANT							
13	Driver 2	Mr. P. D. Dave	Tractor Driver		4000- 6000	5800	06-9-2007	Т	Gen.
14		Mr. H. R. Gohil	Jeep Driver		4000- 6000	4800	01-8-2006	Т	Gen.
15	Supporting staff	Mr. M. H. Solanki	Peon		2650- 3540	4000	08-3-2006	Т	SC
16	2	VACANT							

## 1.6. Total land with KVK (in ha):

Sr. No.	Item	Area (ha)		
1	Under Buildings	04.00		
2.	Under Demonstration Units			
3.	Under Crops 16.00			
4.	Orchard/Agro-forestry			
5.	Others	20.00		

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## 1.7. Infrastructural Development:

## A) Buildings

Sr.	Name of	Source			Sta	ge				
No.	building	of funding		Complete		Complete			Incompl	
		mamg	Completion Date	Plinth area (Sq.m)	Expenditure (Rs.) Total	Starting Date	Plint h area (Sq. m)	Status of construction		
1.	Administrative Building		23-07-2009		10.21	2005-06				
2.	Farmers Hostel		23-07-2009		6.76	2005-06		_		
3.	Staff Quarters (6)	ICAD	23-07-2009		11.97	2005-06				
4	Fencing	ICAR			6.00	2007-08				
5	Rain Water harvesting system		March-07		7,43,411	2006-07		-		
6	Farm godown		23-07-2009			2005-06		_		

## B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep Bolero	2006-07	4,86,500	25873	Transferred to DEE office, JAU, Junagadh
Jeep M&M Pizo	1991	2,03,967*	11927	Working condition but required major repairing

<sup>\*</sup> Transfer from Department of Soil & Agril. Chemistry, J.A.U., Junagadh

## C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Computer	2006-07	49968	Working Cond.
Copier Machine	2006-07	49816	Working Cond.

## 1.8. A). Details SAC meeting conducted in the 2008-09:

Sr. No.	Date	Name and designation of Participants	Salient Recommendations	Action taken	
1		Dr. R.L. Savaliya DEE, JAU, Junagadh	Selection of Bt cotton Suggestion accept Training conducte		
2		D.D. Bera DAO, Surendranagar		in 3rd qtr-on campus	
3		Dr. B.B.Kabariya TO, KVK, Traghadiya	Selection of pesticides	Suggestion accepted. Training conducted	
4		Dr. D.R. Padamani Res. Scientist DFRS, Targhadiya		in 2nd qtr-off campus	
5		Dr. N.D. Bharad TA, DEE Office, JAU, Junagadh	Selection of pure breed	Suggestion accepted. Training conducted in 2nd qtr-on	
6		Dr. J.S. Nariya TO, KVK, Jamnagar		campus	
7		L.B. Shekhada Tech. Officer, SBI, Rajkot	Economic use of fertilizers	Suggestion accepted. Training conducted in 3rd qtr-off campus	
8	80	Dr. D.S. Kelaiya TO, KVK, Amreli			
9	15/10/2008	P.M. Dave Area Manager AKRSP, Chotila	Vocational training should be organized for rural girls on	Suggestion accepted and training conducted at Doliya	
10	15/	Dr. U.V. Pandya Veterinary Officer Chotila	embroidery and sieving	village on 13th Aug-09	
11		C.P. Patel Deputy Director Hort. Surendranager	Vocational training should be organized for empowerment of	Suggestion accepted and training conducted at Aaya	
12		N.S. Sanghani Progressive farmer Chotila	women by making milk product "Mava"	village on 8 <sup>th</sup> Sept09	
13		S.D. Chauhan Gram Sevek, Chotila	Demonstration should be done on enrich	Suggestion accepted and Demonstration	
14		V.P. Maheta Progressive farmer	compost on cotton stalks	conducted at farm and village level	
15		Valubhai Popatbhai Progressive farmer	OFT should be conducted on	Suggestion accepted and OFT conducted	
16		Kishorbhai Harilal Progressive farmer	"Reduction of inter- calving period in Buffalo"	by SMS (Animal Science)	
17		N.L. Kaila L.I., Bamanbor	FLD should be conducted on animal diet instead of OFT	Suggestion accepted and FLD conducted by SMS (Animal Science)	

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#### 2. DETAILS OF DISTRICT:

2.1 Major farming systems/enterprises (based on the analysis made by the KVK):

#### Farming system/enterprise

The district Surendranagar mainly falls in north Saurashtra agro-climatic zone. The district located in India at 22.0° to 23.45° North latitude and 69.45° to 72.15° East longitude. Surendranagar district is bounded in north by Gulf of Kutch and Mehasana district, in the south by Bhavnagar and part of Ahmedabad district, on the east by part of Ahmedabad and west by Rajkot district. The average annual rainfall is 400 mm. The average temperature of the district ranges with 41°C maximum to 11°C minimum. The soil is mostly medium black, shallow to moderately deep and calcareous in nature, therefore cotton is the major crop of the district. Some patches of saline soil found in Dasada and Lakhtar talukas, calcareous sandy soil found in some part of Chotila, Sayla & Dhangdhra taluka and loamy soil is found in some part of Halvad and Dhangdhra taluka. The pH of the soil is alkaline and underground water is non saline in nature.

The district covers 10.48 lakh ha geographical area out of which 6.90 lakh ha under cultivation, of which only 0.62 lakh ha is irrigated. Major area comes under rainfed farming. The main sources of irrigation are wells, tube wells, ponds and canals. The major crops of this region are cotton, sesame & pearl millet and others are sorghum, wheat, chick pea, groundnut, mustard, cumin, green gram, black gram, onion, garlic and vegetables. The fruit orchard area is very less.

### 2.2 Description of Agro-climatic Zone & major agro ecological situations

#### Agro-climatic Zone

#### Characteristics

## PROFILE OF THE NORTH SAURASTRA AGRO - CLIMATIC ZONE VI - GUJARAT





NORTH SAURASTRA AGRO - CLIMATIC ZONE

1. Total geographical area

2. Area under forest

3. Area under non agricultural use : 2.10 lakh ha.

4. Barren and uncultivated land

5. Permanent pasture

6. Current fallows 7. Net sown area

8. Total cropped area

9. Area sown more than one

10. Climate

11. Average rainfall

12. Soil type

: 35.02 lakh ha.

: 1.47 lakh ha.

: 2.52 lakh ha.

: 2.45 lakh ha : 1.70 lakh ha

: 22.17 lakh ha

: 25.77 lakh ha

: 3.61 lakh ha

: Arid and semi arid

: 542.14 mm

: Black to brown & Shallow to moderately deep soil

15. Crop sequence:

#### 13. Cropping pattern:

Crop		Area
		(lakh ha.
Kharif cereals		5.58
Khrif pulses	:	0.23
Kharif oil seeds		12.14
Cash crops		4.00
Rabi cereals	:	1.57
Rabi pulses	:	0.56
Others	:	1.69

#### 14. Major croped area

			1 EUROPEAN CONTROL CON
(%	)		Crop
a) Kharif			Groundnut
Groundnut	1	40	Groundnut - Wheat
Cotton	:	15	Groundnut - Mustard
Pearmillet	2	12	Groundnut - Cumin
Sorghum		10	Groundnut - Chickpea
Sesamum	:	3	Pearl millet - Groundnut
Others	:	20	Pearl millet- Green gram
			Pearl millet- Cumin
b) Rabi			Pearl millet- Mustard
Wheat	:	5	Pearl millet - Garlic
Chickpea	1	2	Cotton
Cumin	:	3	Cotton - Groundnut
			Cotton - Sorghum

#### Agro ecological situation

#### North Saurashtra agro-climatic zone-VI, Gujarat

Eight agro-climatic zones have been identified in Gujarat. The North Saurashtra Agro climatic Zone-VI falls in Saurashtra region. The influence area of North Saurashtra Agro climatic Zone is spread among five districts of Saurashtra region viz., Amreli (9 talukas out of 11), Bhavnagar (6 talukas out of 13), Jamnagar (all the 10 talukas), Rajkot (11 talukas out of 14) and Surendranagar (7 talukas out of 10) covering 43 talukas in all. It is bounded in the north by the gulf of Kutch and parts of Rajkot as well as Surendranagar district, in the east by the Ahmadabad district and coastal part of Bhavnagar district, on the south by the Junagadh district and parts of Amreli as well as Rajkot district, to the west by Arabian sea. The farming situation of the district Surendranagar is rainfed.

### 2.3 Soil type/s

Sr. No.	Soil type	Area
1	Medium black	Vadhvan & Muli
2	Saline & Alkaline soils	Dasada & Lakhatar
3	Shallow calcareous sandy soil	Dhanghdhra
4	Red Loamy soil	Halvad, Dhanghdhra
5	Low land soils	Limbadi, Lakhatar
6	Calcareous Sandy soil	Chotila, Sayla

# 2.4. Area, Production and Productivity of major crops cultivated in the district Surendranagar:

Sr. No.	Crop	Area (ha) 00 ha	Production 00 mt	Productivity Kg/ha
1	Cotton	1353	6076	764
2	Pearl millet	518	837	1616
3	Sesame	882	482	547
4	Groundnut	177	415	2354
5	Wheat	361	1155	3196
6	Cumin	428	266	620
7	Castor	235	621	2641
8	Gram	98	76	781
9	Onion	03	91	29775

<sup>\*</sup>in the year of 2007-2008

## 2.5. Weather data

Month	Rainfall	Rainy	Tempe	rature º C	Relative	
	(mm)	Days	Max.	Min.	Humidity (%)	
April -08	-	-	-	-	-	
May-08	-	-	-	-	-	
June-08	49	-	-	-	-	
July-08	55	-	-	-	-	
August-08	46	-	-	-	-	
September-08	151	-	-	-	-	
October-08	-	-	-	-	-	
November-08	-	-	-	-	-	
December-08	-	-	-	-	-	
January-09	-	-	31.7	11.7	49.69	
February-09	-	-	36.6	14.5	41.35	
March-09	-	-	38.1	18.1	40.50	
April -09	-	-	42.4	20.2	32.3	
May -09	-	-	42.2	22.6	50.0	
June -09	17.5	05	40.6	24.5	60.69	
July -09	125.5	12	38.0	23.1	77.37	
August -09	67.5	4	34.7	23.0	72.04	
September-09 (Running)	2	1	33.6	22.4	69.2	

# Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle	293758		
Crossbred	201	5461197 lit	
Indigenous	293557	3401197 III	
Buffalo	202939		
Sheep	100589		
Goats	179648		
Pigs	22948		
Rabbits			
Poultry			

# 2.6 Details of Operational area / Villages (2008-09)

Sr. No.	Taluka	Name of block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas			
1	2	3	4	5	6	7			
1	Chotila	Chotila	Hirasar	Bajra, Groundnut, Sesame, pulses Diary Farming,	Dry farming, Lower milk production	Dry farming technology Awareness for vaccination & artificial insemination of animals			
			Bajra, Groundnut, Sesame, pulses Diary Farming,	Dry farming, HS disease	Dry farming technology Awareness for vaccination & artificial insemination of animals				
			Lakhanka	Bajra, Cotton, Cumin, Groundnut, Sesame, pulses, Diary Farming,	Dry farming, Lower milk production, HS disease	Dry farming technology, Awareness for vaccination & artificial insemination of animals			
						Kanpar	Bajra, Cotton, Cumin, Wheat, Sesame, Diary Farming,	Dry farming, Injudicious use of fertilizers & Pesticides, Black quarter disease	Adoption of organic farming, Bio-fertilizers & Vermi-compost Dry farming technologies Awareness for vaccination & artificial insemination of animals
			Vijadiya	Groundnut, Cotton, Cumin, Wheat, Sesame, Diary Farming	Lack of knowledge of modern dry land technologies, lack of Awareness for vaccination & artificial insemination of animals	Awareness for vaccination & artificial insemination of animals			

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1	2	3	4	5	6	7
2	Sayla	Sayla	Dhedhuki	Cotton, castor, Groundnut, wheat Diary Farming,	Lack of knowledge of modern dry land technologies, FMD	Dry farming technologies, Awareness for vaccination & artificial insemination of animals
			Kesarpar	Cotton, Wheat, Cumin, Sesame, Bajra	Lack of knowledge of modern dry land technologies, Injudicious use of fertilizers & Pesticides	Dry farming technologies
			Doliya	Cotton, Bajra, Sesame, Wheat, Cumin, Diary Farming, Horticulture	Lack of knowledge about weed, pest and diseases & nutrient management HS disease, Trypanosomesis disease	To motivate farmers to grow arid and semi arid horticultural crops. Awareness for vaccination & artificial insemination of animals
			Aaya	Cotton, Wheat, Cumin, Sesame, Bajra, Groundnut	Lack of knowledge of modern dry land technologies, Injudicious use of fertilizers & Pesticides	Dry farming technologies,
			Kanpur	Horticulture Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra	FMD, Lack of knowledge of modern dry land technologies	Awareness for vaccination & artificial insemination of animals
3	Muli	Muli	Umarda	Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra	FMD, Lack of knowledge of modern dry land technologies	Awareness for vaccination & artificial insemination of animals
			Palasa	Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra	Awareness for vaccination & artificial insemination of animals	Awareness for vaccination & artificial insemination of animals
			Ramparda	Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra	HS disease, Injudicious use of fertilizers & Pesticides	Awareness for vaccination & artificial insemination of animals
			Gadhad	Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra	Awareness for vaccination & artificial insemination of animals	Awareness for vaccination & artificial insemination of animals

## 2.7 Prioritized thrust areas

Crop/ Enterprise	Thrust area							
Cotton, Sesamum, Groundnut, Bajra	Dry farming technologies.							
Animal	Awareness for vaccination & artificial insemination of							
Husbandry	animals							
Crop	Adoption of organic farming, Bio-fertilizers & Vermi-							
Management	compost.							
Integrated Crop	Integrated weed, pest and diseases & nutrient							
Management	management.							
Home Science	Farm women empowerment.							
Lemon, Ber	To motivate farmers to grow arid and semi arid							
	horticultural crops.							

## 3. TECHNICAL ACHIEVEMENTS:

# 3.A. Details of target and achievements of mandatory activities by KVK during 2008-09

C	FT	•	ogy Asses inement)	sment and		FL	D (O	ilseeds, l Crops/			n, Ot	her
			1						2			
N		ber of Ts	Numbe	er of Farme	rs	Numbe	er of	f FLDs	Nu	mber (	of Far	mers
Tar gets	Acl me	hieve- ent	Targets /	Achievement		Targets		hieve- ent	Targets	Achi	eveme	ent
3		3	9	9		57 ha		57 ha	114		11	4
		Ot	her OFT					Ot	her FL	, <b>D</b>		
2		2	33	33		2		2	14		14	1
Tra		<b>Ig</b> (including	sponsored,	vocational and er Harvesting U			Extension Activit					
			3						4			
Nun	nbei	r of Cours		Number of Participants				ber of vities		of nts		
Targ	ets	Achieve ment	e- Targe	Achie mer		Targe	ets	Achieve ment	e- Targets			chieve- ment
85	5	91		192	4	20		20		-		-
				Seed Prod	ucti	on kg						anting rial (Nos
				5								6
T				Ach	ieveı	ment					Т	A
		Name of crop	Variety	Type of produce		ıantity (g)	Se (K	eds Sale g)	Incom (Rs.)	me		
		Castor	JI-96	Nucleus	15	51	46	5	3,680	)/-		
	G	roundnut	GG-2	Breeder	65	512	54	156	2,72,8	300/-		
							10	)56	Farm	Use		
	G	roundnut	GG-20	General	28	320	84	Ю	38,36	0/-		
							60	00	Farm	Use		
		Cotton	Bt	General	10	35	10	)35	28,72	21/-		
	F	Pigeon pea	BDN-2	General	95	5	_		-		-	
	В	lack gram	T-9	General	13	30	13	30	1,599	)/-		
	M	futh bean	Guj-2	General	50	)	50	)	750/-	-		
		Cumin	GC-4	General	21	.5	_		_			
		Wheat	GW-496	General	32	200	_		_			
	P	Pearl millet	GHB-538	General	74	-0	74	Ю	6,660	)/-		

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## 3.B. Abstract of interventions undertaken

						Inter	ventions		
Sr. No.	Thrust area	Crop/ Enterprise	Identified Problem	Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1	2	3	4	5	6	7	8	9	10
1		Groundnut	Low yield		Varietal evaluation	Production technology of cotton & groundnut  Value addition in groundnut  Production technology of summer groundnut  Pure seed production technique in sesame & groundnut  IPM in groundnut  Economic use of fertilizers in major kharif	1. Preseasonal training on rabi crops 2. Preseasonal training on kharif crops 3. Cotton production technology	Filed Day - 08	FLD: Seed inputs: GG-20 Insecticide: Hexaconazol 5 % EC
2		Sesamum	Low yield	Effect of Supplementary Inigation On yield of sesamum	Varietal evaluation	Pure seed production technique in sesame & groundnut  Economic use of fertilizers in major kharif crops  Management of pest & disease of sesamum  Importance of thinning, gap filling & maintenance of plant population in major kharif crops			FLD: Seed inputs: Guj.Sesamum-2 Insecticide: Saaf 75 % (Mencozeb 63 % + Carbendenzim 12 %) Quinalphos 25 % EC OFT: Endosulphan 35 %

### Cont....

1	2	3	4	5	6	7	8	9	10
3		Green Gram	Low yield		Varietal evaluation	Economic use of fertilizers in major kharif crops	u	u	FLD: Seed inputs: Guj.Greengram- 4 Insecticide:
						Control measures for pest & disease of kharif pulses			Endosulphan 35 %
4		Muth	Low yield		Varietal evaluation	Economic use of fertilizers in major kharif crops			FLD: Seed inputs: Guj.Muth-2 Insecticide: Dichlorovos 76%
						Control measures for pest & disease of kharif pulses			
5		Cotton	Low yield	Management of sucking pests in Cotton	Varietal evaluation	Production technology of cotton & groundnut			FLD: Seed inputs: RCH-2 Insecticide: Imidachloprid 17.8
						Precautions while handling pesticides		% Acetamaprid 20% Methyl-o-demetone 25% OFT: Thiomethoxan 25	
						Economic use of fertilizers in major kharif crops			% Imidachloprid 17.8 % Acetamaprid 20% Dimethoate 30% Methyl-o-demetone 25%
6		Bio-agent	Heavy infestation	Application of Tricho derma	Yield evaluation	Importance of IPM			FLD : Bio-agent : Trichoderma
				against stem rot Disease in g'nut		Selection of chemical pesticides			harzianum Culture OFT: Trichoderma harzianum Culture Castor cake

#### Cont...

1	2	3	4	5	6	7	8	9	10	
7		Mustard	Low yield		Varietal evaluation	Integrated weed management in rabi field crops  Plant protection measures in castor & mustard	"	u	Seed input: Guj- Mustard-3 Insecticide: Phospphamidon 40 EC Quinalphos 25 % Sulphur 80 WP	
						Efficient water management in major rabi field crops			Stomp	
8	-	Gram	Low yield	-	Varietal evaluation	Integrated weed management in rabi field crops			Seed input : Guj.Gram-1 Insecticide :	
						Efficient water management in major rabi field crops			Quinalphos 25 %	
9	-	Cumin	Low yield		Varietal evaluation	Improved cultivation practice for wheat and cumin			Seed input : Guj.Cumin-4 Fungicide : Mancozeb 75 WP	
						Plant protection measures for pest & disease in cumin	ction ures for & se in		Hexaconazol 5 %	
						Integrated weed management in rabi field crops				
						Control measures for pest & disease in cumin & wheat				
						Efficient water management in major rabi field crops				
10	-	Wheat	Low yield		Varietal evaluation			Seed input: GW-366 Insecticide: Endosulphan 35%		
						Control measures for pest & disease in cumin & wheat			Monocrotophos 36 %	
						Efficient water management in major rabi field crops				

## 3.1. Achievements on technologies assessed and refined

# A.1. Abstract of the number of technologies assessed in respect of crops/enterprises

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	TOTAL
Varietals Evaluation					
Seed / Plant production					
Weed Management					
Integrated Crop Management		1			1
Integrated Nutrient Management					
Integrated Farming System					
Mushroom cultivation					
Drudgery reduction					
Farm machineries					
Value addition					
Integrated Pest Management				1	1
Integrated Disease Management		1			1
Resource conservation technology					
Small Scale income generating enterprises					
TOTAL		2		1	3

A.2 Abstract of the number of technologies refined in respect of crops/enterprises: NIL

# A.3 Abstract of the number of technologies assessed in respect of livestock/enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Other	TOTAL
Evaluation of Breeds						
Nutrition Management						
Disease of Management						
Value Addition						
Production and	1					1
Management						
Feed and Fodder						
Small Scale income						
generating enterprises						
Women & Child care					1	1
TOTAL	1				1	2

A.4 Abstract of the number of technologies refined in respect of livestock/enterprises: NIL

#### B Details of each On Farm Trial to be furnished in the following format

#### A. Technology Assessment

#### Trial 1

- 1. Title of Technology assessed / Refined:
  - \* Application of Trichoderma against stem rot disease in groundnut
- 2. Problem Definition
  - \*Heavy attack of stem rot
- 3. Details of technologies selected for assessment/refinement
  - \*T1- Farmer's practice (Control)
  - \*T2- Mixing Trichoderma @ 2.5 Kg with castor cake @ 500 Kg at the time of sowing
  - \*T3- Soil drenching of Trichoderma @ 50 gm/10 lit. of water with spray pump without nozzle
- 4. Source of technology
  - \*Junagadh Agricultural University, Junagadh.
- 5. Production system and thematic area
  - \*Package of practices
- 6. Thematic area
  - \* Integrated disease management
- 7. Performance of the Technology with performance indicators
  - \*Result is in Table -A
- 8. Final recommendation for micro level situation
  - \* Under progress
- 9. Constraints identified and feedback for research: NIL
- 10. Process of farmers participation and their reaction
  - \* Result is in Table -A
- 11. Result of On Farm Trial

Table – A

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Dataon the parameter
1	2	3	4	5	6	7	8
G'nut	Irrigated	Stem rot	Application of Tricho derma against stem rot Disease in ghut	3	T1- Farmer's practice (Control) T2- Mixing Trichoderma @ 2.5 Kg with castor cake @ 500 Kg at the time of sowing T3- Soil drenching of Trichoderma @ 50 gm/10 lit. of water with spray pump without nozzle	Yield evaluation	Yield (qt/ha)
		Results of assessment			Feedba	sk from the	e farmer
		9				10	
	Av	v. Yield (qt/ha)					control against
T-1		T-2	T-3				at unavailability ot sured at the
10.33		12.10	11.73	-	of applicati		
Asse	nology ssed / ined	*Production per unit	Net Return (Profit) in Rs. / unit		E	SC Ratio	•
1	l <b>1</b>	12	13			14	
Farmer' practice		10.33	14858		]	1:1.10	
Recomn (T-2)	nended	12.10	17575		]	1:1.12	
Modified	1 (T-3)	11.73	18457		1	1:1.34	

\_\_\_\_\_\_

#### Trial 2

- 1. Title of Technology assessed / Refined:
  - \* Management of sucking pests in Cotton
- 2. Problem Definition
  - \*Heavy attack of sucking pests
- 3. Details of technologies selected for assessment/refinement
  - \*T1- Farmer's practice (Use of new insecticides with higher doses)
  - \*T2- Use of old insecticides at recommended dose
  - \*T3- Alternate treatment 1 & 2 with recommended doses

\*New insecticides

\*Old insecticides

1. Thiomethoxan

1. Dimethoate

2. Imidachloprid

2. Methyl-o-demetone

- 3. Acetamaprid
- 4. Source of technology
  - \*Junagadh Agricultural University, Junagadh.
- 5. Production system and thematic area
  - \*Package of practices & recommended plant protection measures
- 6. Thematic area
  - \*Integrated pest management
- 7. Performance of the Technology with performance indicators
  - \* Result is in Table -B
- 8. Final recommendation for micro level situation: Under progress
- 9. Constraints identified and feedback for research: NIL
- 10. Process of farmers participation and their reaction
  - Result is in Table -B

## 11. Result of On Farm Trial

Table – B

Crop/ enterpris	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Dataon the parameter
1	2	3	4	5	6	7	8
Cotton	Irrigated	Sucking pest	Management of sucking pests in Cotton	3	*T1- Farmer's practice (Use of new insecticides with higher doses) *T2- Use of old insecticides at recommended dose *T3- Alternate treatment 1 & 2 with recommended doses *New insecticides Thiomethoxan Imidachloprid Acetamaprid *Old insecticides Dimethoate Methyl-o-demetone	Yield evaluation	Yield (qt/ha)
		Results of assessment			Feedba	dk fiom th	e farmer
		9				10	
	A	v. Yield (qt/ha)		At	the earlier		of cotton old le later on when
T-1		T-2	T-3	infes	station of su	acking pe	st becomes high
15.57		15.70	16.30	heno	n newly inse ce Treatmer tment-1 & 2	nt-3 is	ives good results economic than ely
Asse	nology ssed / fined	*Production per unit	Net Return (Profit) in Rs. / unit		I	BC Ratio	)
	11	12	13			14	
Farme practio	r's ce (T-1)	15.57	24210			1:1.08	
Recom (T-2)	mended	15.70	26000			1:1.23	
Modifie	ed (T-3)	16.30	26100			1:1.14	

#### Trial 3

1. Title of Technology assessed / Refined:

#### \* Effect of supplementary irrigation on yield of sesame

- 2. Problem Definition
  - \*Management of irrigation is not proper
- 3. Details of technologies selected for assessment/refinement
  - \*T1- Farmer's practice (Control)
  - \*T2- Irrigation at 50% flowering stage or at capsule development stage (Life saving irrigation)
  - \*T3- Two irrigation at 50% flowering & capsule development stage
- 4. Source of technology
  - \*Junagadh Agricultural University, Junagadh.
- 5. Production system and thematic area:
  - \*Package of practices
- 6. Thematic area
  - \*Integrated crop management
- 7. Performance of the Technology with performance indicators
  - \* Result is in Table -C
- 8. Final recommendation for micro level situation: Under progress
- 9. Constraints identified and feedback for research: NIL
- 10. Process of farmers participation and their reaction
  - Result is in Table –C

## 11. Result of On Farm Trial

Table - C

Crop/ enterpris	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Dataon the parameter
1	2	3	4	5	6	7	8
Sesamum	Irrigated	Time of Irrigation	Effect of Supplementary Irrigation On yield of sesamum	3	T1- Farmer's practice T2- Two inrigation 50 % flowering and capsule development stage T3- Irrigation at 50% flowering stage or at capsule development stage (Life saving irrigation)	Yield evaluation	Yield (qt/ha)
		Results of assessment			Feed	oack from t	he farmer
		9				10	
	A	v. Yield (qt/ha)					t the critical stage eveloped stage) at
T-1		T-2	Т-3	thes	e critical st	tages irrig	gation Treatment-2
5.05		5.72	5.65	show 3	vs good out	put over	the Treatment-1 &
Asse	nnology essed / efined	*Production per unit	Net Return (Profit) in Rs. / unit			BC Rat	io
	11	12	13			14	
Farme practi	er's ce (T-1)	5.05	19800			1:1.89	
Recon (T-2)	nmended	5.72	22620			1:1.93	
Modifi	ied (T-3)	5.65	22800			1:2.05	

#### Trial 4

1. Title of Technology assessed / Refined:

#### \* Reduction of Intercalving period in Buffalo

2. Problem Definition

\*Long Intercalving period

3. Details of technologies selected for assessment/refinement

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*T1- Farmer's practice
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\*T2- Panacure (1.5 gm) + Vetcominforte (1 Kg)

\*T3- Bioheat (1 No.) + Vetcominforte (1 Kg)

\*T4- Panacure (1.5 gm) + Bioheat (1 No.)

4. Source of technology

\*Anand Agricultural University, Anand.

5. Production system

\*Package of practices

6. Thematic area

\*Production and Management

- 7. Performance of the Technology with performance indicators
  - \* Experiment under progress
- 8. Final recommendation for micro level situation: Under progress
- 9. Constraints identified and feedback for research: NIL
- 10. Process of farmers participation and their reaction
  - Result is in Table –D

## 11. Result of On Farm Trial

Table – D

Crop/ enterpri	Farming situation	nation Diagnosec OF	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Dataon the parameter		
1	2	3	4	5	6	7	8		
Buffalo	-	Long Intercalving period	Reduction of intercalving period in Buffalo	4	T1- Farmer's practice T2- Panacure + Vetcominforte T3- Bioheat + Vetcominforte T4- Panacure + Bioheat	Post partum heat	No of days (Months)		
		9				10			
Pos	t partum		on (months)						
T-1	T-2	T-3	T-4				-		
		4 Months							
Asse	Technology Post p		eartum heat uration	N	et return	(Rs./Lactation)			
	11		12	13					
			Experiment u	nder	progress				

#### Trial 5

- 1. Title of Technology assessed / Refined:
  - \* Feeding of protein and energy rich diet to children to cure protein energy malnutrition in rural area (Age group -1 to 3 years)
- 2. Problem Definition
  - \*Lack of knowledge about balance diet
  - \* Poor economical condition
  - \* Lack of nutritional meal management
- 3. Details of technologies selected for assessment/refinement
  - \*T1- Control without any extra food (Control)
  - \*T2- Use a mixture of cereals (30 gm)+pulses (10 gm)+ghee (5 gm) for second group of children (Age group- 1 to 3 years)
  - \*T3- Use a mixture of cereals (30 gm)+sprouted pulses (10 gm)+ghee (5 gm) for first group of children (Age group- 1 to 3 years)
- 4. Source of technology
  - \*Junagadh Agricultural University, Junagadh.
- 5. Production system and thematic area:
  - \*Women and child care
- 6. Thematic area
  - \*Women and child care
- 7. Performance of the Technology with performance indicators
  - \* Result is in Table -E
- 8. Final recommendation for micro level situation: NIL
- 9. Constraints identified and feedback for research: Some people are not giving mixture regularly
- 10. Process of farmers participation and their reaction
  - \* Children are ready to eat the mixture and mothers are also getting conscious about protein and energy rich diet

#### 11. Result of On Farm Trial

Table – E

Crop/ enterpri	Farming situation	Problem Diagnose	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment			Dataon the paramet	_
1	2	3	4	5	6	7			8	
5.Home Science	-	Deficiency of protein, energy and other nutrient	Feeding of protein and energy rich diet to children in rural to cure malnutrition (Age group - 1 to 3 years).	3	Feeding of protein and energy rich diet to children in rural for remove malnutrition deficiency (Age group – 1 to 3 yrs).	- Height of children - Weight of children - Chest circumferenc Waist	æ	rs of the technology		
				Dat	ta on the per	formance in Assessed,		of the	techno	ology
No No		e of the	Name of	Tec	a on the per hnology otion 1		/refined ology			ology y option
Ramer No		e of the ildren	Name of the Village	Tec or	hnology otion 1	Techno optio	/refined ology on 2	Tech	nolog	y option
Sames.	Ch			Tec or	hnology otion 1	Assessed, Technological	/refined ology on 2	Tech	nolog 3	y option
	Ch Rutvik V	ildren	the Village –	Indicator 1	hnology otion 1 Indicator 3	Techno optio	refined ology on 2 Elimicator 3 Findicator 3	Tech	nolog	Indicator 3
1	Ch Rutvik V	J. Dalvadi Sanosara J.	the Village –	- Indicator 1	hnology otion 1 Indicator 3	Techno optio	refined ology on 2 Elimicator 3 Findicator 3	Lindicator 1	Indicator 2	hodicator 3

4.9

3

2.2

-

3.4

-

0.4

0.2

0.2

0.27

2

2

2

2.5

3

1.5

0.5

0.3

0.3

0.37

1

1.5

0

0.67

Dhedhuki

Dhedhuki

Dhedhuki

Aaya

Aaya

Aaya

## B. Technology Refinement: NIL

Maya B. Dabhi

Janki J. Vegad

Gopal Y. Shiva

Average

Shilpa M. Kudecha

Sunita S. Kudecha

Alpesh M. Kudecha

5

6

7

8

9

I-1 Difference in Weight, I-2 Difference in Height, I-3 Chest & waist difference

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#### 3.2 Achievements of Frontline Demonstrations

a. Follow-up for results of FLDs implemented during previous years List of technologies demonstrated during previous year and popularized during 2008-09 and recommended for large scale adoption in the district

Sr. No.	na Rea	Technology demonstrated	Details of popularization	Horizontal spread of technology					
Ø	Thema tic area		methods suggested to the Extension system	No. of villages	No. of farmers	Area in ha			
1		GG-20 (G'nut)	FLD,	14	1500				
2		Guj.Til-2 (Sesame)	Field Day & Training						
3	Jg B	Guj.Greeengram-4 (Green gram)	Training						
4	farming	Guj. Muth-2 (Muth)							
5		Bt Irrigated							
6	Dry	Trichoderma culture (Bio-agent)							
7		Guj.Musrard-3 (Mustard)							
8		Guj. Gram-1 (Gram)							
9		Guj.Cumin-4 (Cumin)							
10		GW – 366 (Wheat)							

## b. Details of FLDs implemented during 2008-09

Sr No	Crop	Thematic area	Technology Demon-	Season and	Area (	Area (ha)		. of farr monstr	-	Reasons for shortfall in
		The	strated	year	Proposed	Actua	SC /ST	Other s	Total	achievement
1	G'nut	S	Varietal	Kharif 08-09	5.0	5.0	1/0	9	10	
2	Sesame	ctic	evaluation, recommended	Kharif 08-09	5.0	5.0	0/0	10	10	
3	Green Gram	Package of practices	package of practices	Kharif 08-09	5.0	5.0	3/0	7	10	
4	Muth	kagu		Kharif 08-09	5.0	5.0	3/0	7	10	
5	Cotton	Pac		Kharif 08-09	5.0	5.0	1/0	9	10	
6	Bio- agent			Kharif 08-09	2.0	2.0	1/0	3	04	
7	Mustard			Rabi 08-09	10.0	10.0	4/0	16	20	
8	Gram			Rabi 08-09	5.0	5.0	0/0	10	10	
9	Cumin			Rabi 08-09	5.0	5.0	1/0	9	10	
10	Wheat			Rabi 08-09	10.0	10.0	2/0	18	20	

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# Details of farming situation

		on (		:	Stati	us of soil				뒾	às
Crop	Season	Farming situation (RF/Irrigated)	Soil type	N	P	К	Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
G'nut	Khan 08-09	Irrigated	Medium black	L	M	Н	Wheat	14/6/08	02/10/08	301	
		Irrigated	"	L	M	Н	Cotton	13/6/08	04/10/08	301	
		Irrigated	"	L	M	Н	Wheat	16/6/08	08/10/08	301	
		Irrigated	"	L	M	Н	Groundnut	03/7/08	16/10/08	301	
		Irrigated	"	L	M	Н	Sesame	14/6/08	30/9/08	301	
		Irrigated	"	L	M	Н	Cotton	16/6/08	05/10/08	301	
		Irrigated	"	L	M	Н	Wheat	17/6/08	06/10/08	301	
		Irrigated	"	L	M	Н	Groundnut	15/6/08	04/10/08	301	
		Irrigated	"	L	M	Н	Cotton	04/7/08	20/10/08	301	
		Irrigated	"	L	M	Н	Wheat	03/7/08	22/10/08	301	
Sesamo	Khari	Irrigated	"	L	M	Н	Groundnut	16/6/08	20/9/08	301	
	08-09	Irrigated	"	L	M	Н	Cumin	14/6/08	18/9/08	301	
		Irrigated	"	L	M	Н	Greengram	15/6/08	15/9/08	301	
		Irrigated	"	L	M	Н	Gram	03/7/08	04/10/08	301	
		Irrigated	"	L	M	Н	Mustard	16/6/08	18/9/08	301	
		Irrigated	"	L	M	Н	Cotton	03/7/08	04/10/08	301	
		Irrigated	"	L	M	Н	Greengram	04/7/08	02/10/08	301	
		Irrigated	"	L	M	Н	Gram,	15/6/08	18/9/08	301	
		Irrigated	"	L	M	Н	Wheat	16/6/08	20/9/08	301	
		Irrigated	"	L	M	Н	Sorghum	15/6/08	20/9/08	301	
Green	Khari	Irrigated	"	L	M	Н	Blaclgram	13/6/08	05/9/08	301	
Gram	08-09	Irrigated	"	L	M	Н	Greengram,	16/6/08	10/908	301	
		Irrigated	"	L	M	Н	Groundnut	04/7/08	24/9/08	301	
		Irrigated	"	L	M	Н	Gram	13/6/08	04/9/08	301	
		Irrigated	"	L	M	Н	Wheat	14/6/08	01/9/08	301	
		Irrigated	"	L	M	Н	Cotton	16/6/08	03/9/08	301	
		Irrigated	"	L	M	Н	Greengram	04/7/08	24/9/08	301	
		Irrigated	"	L	M	Н	Wheat	16/6/08	04/9/08	301	
		Irrigated	"	L	M	Н	Cumin	14/6/08	08/9/08	301	
		Irrigated	"	L	M	Н	Gram	15/6/08	10/9/08	301	

Muth bean	<i>Khar</i> i 08-09	Irrigated	Medium black	L	M	Н	Greengram	03/7/08	13/9/08	301	
		Irrigated	"	L	M	Н	Blackgram	03/7/08	11/9/08	301	
		Irrigated	"	L	M	Н	Cotton	04/7/08	12/9/08	301	
		Irrigated	"	L	M	Н	Wheat	04/7/08	10/9/08	301	
		Irrigated	"	L	M	Н	Cotton	04/7/08	11/9/08	301	
		Irrigated	"	L	M	Н	Gram	04/7/08	15/9/08	301	
		Irrigated	"	L	M	Н	Groundnut	03/7/08	14/9/08	301	
		Irrigated	"	L	M	Н	Wheat	04/7/08	17/9/08	301	
		Irrigated	"	L	M	Н	Cumin	04/7/08	15/9/08	301	
		Irrigated	"	L	M	Н	Groundnut	04/7/08	16/9/08	301	
Cotton	<i>Khar</i> i 08-09	Irrigated	Medium black	L	M	Н	Cotton	14/6/08	Different Pickings	301	
		Irrigated	"	L	M	Н	Cotton	14/6/08		301	
		Irrigated	"	L	M	Н	Groundnut	13/6/08		301	
		Irrigated	"	L	M	Н	Cotton	17/6/08		301	
		Irrigated	"	L	M	Н	Cotton	17/6/08		301	
		Irrigated	"	L	M	Н	Groundnut	15/6/08		301	
		Irrigated	"	L	M	Н	Cotton	14/6/08		301	
		Irrigated	"	L	M	Н	Wheat	15/6/08		301	
		Irrigated	"	L	M	Н	Wheat	16/6/08		301	
		Irrigated	"	L	M	Н	Cotton	16/6/08		301	
Bio-ager	<i>Khar</i> i 08-09	Irrigated	Medium black	L	M	Н	Cotton	16/6/08	30/9/08	301	
		Irrigated	"	L	M	Н	Wheat	15/6/08	02/10/08	301	
		Irrigated	"	L	M	Н	Groundnut	15/6/08	04/10/08	301	
		Irrigated	"	L	M	Н	Cotton	16/6/08	02/10/08	301	

Mustard	Rabi 08-09	Irrigated	Medium black	L	M	Н	Sesame	05/10/08	06/2/09	301	
		Irrigated	"	L	M	Н	Greeengram	14/10/08	17/2/09	301	
		Irrigated	"	L	M	Н	Sorghum	09/10/08	07/2/09	301	
		Irrigated	"	L	M	Н	Sesame	19/10/08	16/2/09	301	
		Irrigated	"	L	M	Н	Vegetables	07/10/08	10/2/09	301	
		Irrigated	"	L	M	Н	Groundnut	25/10/08	22/2/09	301	
		Irrigated	"	L	M	Н	Greemgram	06/10/08	07/2/09	301	
		Irrigated	"	L	M	Н	Cotton	07/10/08	07/2/09	301	
		Irrigated	"	L	M	Н	Blackgram	20/10/08	16/2/09	301	
		Irrigated	"	L	M	Н	Sesame	19/10/08	15/2/09	301	
		Irrigated	"	L	M	Н	Groundnut	22/10/08	21/2/09	301	
		Irrigated	"	L	M	Н	Sesame	07/10/08	10/2/09	301	
		Irrigated	"	L	M	Н	Greemgram	06/10/08	08/2/09	301	
		Irrigated	"	L	M	Н	Blackgram	13/10/08	25/2/09	301	
		Irrigated	"	L	M	Н	Groundnut	26/10/08	22/2/09	301	
		Irrigated	"	L	M	Н	Sorghum	11/10/08	13/2/09	301	
		Irrigated	"	L	M	Н	Vegetables	16/10/08	20/2/09	301	
		Irrigated	"	L	M	Н	Greengram	07/10/08	08/2/09	301	
		Irrigated	"	L	M	Н	Bajra	21/10/08	22/2/09	301	
		Irrigated	"	L	M	Н	Groundnut	15/10/08	12/2/09	301	
Gram	Rabi 08-09	Irrigated	Medium black	L	M	Н	Cotton	09/11/08	01/3/09	301	
		Irrigated	"	L	M	Н	Sorghum	15/11/08	04/3/09	301	
		Irrigated	"	L	M	Н	Fenugreek	12/11/08	03/3/09	301	
		Irrigated	"	L	M	Н	Greemgram	14/11/08	04/3/09	301	
		Irrigated	"	L	M	Н	Groundnut	20/11/08	11/3/09	301	
		Irrigated	"	L	M	Н	Sorghum	10/11/08	05/3/09	301	
		Irrigated	"	L	M	Н	Bajra	12/11/08	03/3/09	301	
		Irrigated	"	L	M	Н	Groundnut	09/11/08	05/3/09	301	
		Irrigated	"	L	M	Н	Sesame	21/11/08	15/3/09	301	
		Irrigated	"	L	M	Н	Greengram	16/11/08	06/3/09	301	

Cumin	Rabi 08-09	Irrigated	Medium black	L	M	Н	Sorghum	07/11/08	03/3/09	301	
		Irrigated	"	L	M	Н	Groundnut	10/11/08	01/3/09	301	
		Irrigated	"	L	M	Н	Sesame	09/11/08	02/3/09	301	
		Irrigated	"	L	M	Н	Greengram	14/11/08	05/3/09	301	
		Irrigated	"	L	M	Н	Groundnut	10/11/08	04/3/09	301	
		Irrigated	"	L	M	Н	Blackgram	20/11/08	15/3/09	301	
		Irrigated	"	L	M	Н	Sorghum	11/11/08	07/3/09	301	
		Irrigated	"	L	M	Н	Vegetables	12/11/08	05/3/09	301	
		Irrigated	"	L	M	Н	Greengram	14/11/08	06/3/09	301	
		Irrigated	"	L	M	Н	Sesame	08/11/08	01/3/09	301	
Wheat	Rabi 08-09	Irrigated	Medium black	L	M	Н	Groundnut	15/11/08	07/3/09	301	
		Irrigated	"	L	M	Н	Cotton	23/11/08	12/3/09	301	
		Irrigated	"	L	M	Н	Groundnut	16/11/08	08/3/09	301	
		Irrigated	"	L	M	Н	Sesame	10/11/08	01/3/09	301	
		Irrigated	"	L	M	Н	Blackgram	25/11/08	18/3/09	301	
		Irrigated	"	L	M	Н	Groundnut	14/11/08	05/3/09	301	
		Irrigated	"	L	M	Н	Greengram	20/11/08	10/3/09	301	
		Irrigated	"	L	M	Н	Sesame	16/11/08	26/3/09	301	
		Irrigated	"	L	M	Н	Bajra	22/11/08	11/3/09	301	
		Irrigated	"	L	M	Н	Vegetables	28/11/08	18/3/09	301	
		Irrigated	"	L	M	Н	Greengram	20/11/08	12/3/09	301	
		Irrigated	"	L	M	Н	Sesame	22/11/08	13/3/09	301	
		Irrigated	"	L	M	Н	Blackgram	16/11/08	04/3/09	301	
		Irrigated	"	L	M	Н	Groundnut	10/11/08	02/3/09	301	
		Irrigated	"	L	M	Н	Bajra	24/11/08	14/3/09	301	
		Irrigated	"	L	M	Н	Cotton	13/11/08	03/3/09	301	
		Irrigated	"	L	M	Н	Groundnut	09/11/08	01/3/09	301	
		Irrigated	"	L	M	Н	Greengram	10/11/08	02/3/09	301	
		Irrigated	"	L	M	Н	Blackgram	11/11/08	02/3/09	301	
		Irrigated	"	L	M	Н	Sesame	09/11/08	01/3/09	301	

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## Performance of FLD

Sr. No	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)		Demo. Yiel Qti/ha	d	Yield of local Check Qtl./ha	Increase in yield (%)	parar rela tech	ta on neter in tion to nology nstrated
						Н	L	A			Dem	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	G'nut	Varietal	GG-20	10	5.0	18.90	7.90	14.84	12.49	18.81	-	-
2	Sesame	evaluation, recommended	Guj.Til-2	10	5.0	7.80	2.40	5.14	4.41	16.55	-	-
3	Green Gram	package of practices	Guj.Green Gram-4	10	5.0	10.10	4.30	7.10	6.15	15.44	-	-
4	Muth bean		Guj.Muth-2	10	5.0	8.50	3.20	6.42	5.53	16.09		
5	Cotton		Bt Irrigated	10	5.0	28.70	11.50	19.30	16.29	18.47	-	-
6	Bio- agent		Trichodermo harzianum	04	2.0	19.75	1.10	15.80	14.01	12.78	-	-
7	Mustar		Guj. Mustard-3	20	10.0	27.20	14.40	22.69	19.75	14.88	-	-
8	Gram		Guj. Gram-1	10	5.0	22.40	15.20	19.27	16.76	15.01	-	-
9	Cumin		Guj.Cumin- 4	10	5.0	08.25	04.60	06.93	05.91	17.27	-	-
10	Wheat		GW-366	20	10.0	50.15	31.20	40.85	35.95	13.62	-	-

## **Economic Impact (Continuation of previous table)**

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit- Cost	
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	Return	
14	15	16	17	18	19	20	
17500/-	17350/-	37100/-	31225/-	19600/-	13875/-	1:1.80	
10150/-	9900/-	28270/-	24255/-	18120/-	14355/-	1:2.76	
7350/-	7200/-	15620/-	13530/-	8270/-	6330/-	1:2.13	
6125/-	6000/-	13482/-	11613/-	7357/-	5613/-	1:2.20	
23650/-	25400/-	54040/-	45612/-	30390/-	20212/-	1:2.28	
18900/-	17500/-	39500/-	35025/-	20600/-	17525/-	1:2.09	
12750/-	13900/-	50485/-	43944/-	37735/-	30044/-	1:3.96	
11700/-	13200/-	41912/-	36453/-	30212/-	23253/-	1:3.58	
14500/-	15750/-	68954/-	58805/-	54454/-	43055/-	1:4.76	
13600/-	14500/-	46978/-	41343/-	33378/-	26843/-	1:3.45	

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**Analytical Review of component demonstrations** (details of each component for rainfed / irrigated situations to be given separately for each season).

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in Productivity over local check
		1. Seed/Variety				
G'nut	Kharif 08-09	GG-20	Irrigated	14.84	12.49	18.81
Sesame	Kharif 08-09	Guj.Til-2	Irrigated	5.14	4.41	16.55
Green Gram	Kharif 08-09	Guj.Green Gram-4	Irrigated	7.10	6.15	15.44
Muth bean	Kharif 08-09	Guj.Muth-2	un Irrigated	6.42	5.53	16.09
Cotton	Kharif 08-09	Bt	Irrigated	19.30	16.29	18.47
Bio-agent	Kharif 08-09	Trichoderma harzianum	Irrigated	15.80	14.01	12.78
Mustard	Rabi 08-09	Guj. Mustard-3	Irrigated	22.69	19.75	14.88
Gram	Rabi 08-09	Guj. Gram-1	Irrigated	19.27	16.76	15.01
Cumin	Rabi 08-09	Guj. Cumin-4	Irrigated	06.93	05.91	17.27
Wheat	Rabi 08-09	GW-366	Irrigated	40.85	35.95	13.62

## Technical Feedback on the demonstrated technologies

Sr. No	Feed Back			
1	Groundnut short duration and disease resistance variety required for kharif season so suitable for dry farming			
2	In sesamum there is need for short duration drought resistant variety because of untimely and erratic rainfall			
3	In cotton there is further need for tolerant variety against the sucking pest			
4	In mustard, aphid resistant variety highly needed			
5	The wheat variety GW-366 is superior but requires research variety for short duration and late sowing so cotton growers can be adopt it			
6	Gram wilt resistance variety required so losses up to 70 % minimize			

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# Farmers' reactions on specific technologies

Sr. No	Feed Back
1	Sesamum: - Guj. Til-2 is higher yielder over local but requires disease resistance variety
2	Groundnut:  - GG-20 is good but, it is require short duration variety erratic rainfall affect the yield of groundnut
3	Cotton:  - Like Bt variety resistance over larvae, it is require the sucking pest resistance variety
4	Green gram: Guj.Green gram-4 is superior over K-851, it mature once a time so more picking not required
5	Moth bean: Guj. Moth bean-2 is suitable even under late onset or early session of monsoon due to short duration
6	Gram:  - It is good variety over local varieties, but at maturity stage, wilt and pod borer infestation occur
7	Cumin: - High yielder and wilt resistance but poor and late germination
8	<ul> <li>Wheat: 366</li> <li>i. Warmer temp. during crop season shorten the growth duration resulting in poor yield</li> <li>ii. The variety yield better than Lok-1 and GW-496</li> <li>iii. The baking quality also fine</li> </ul>
9	Mustard:  - The variety GM-3 is higher yielder but aphid attack reduces the yield

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## Extension and Training activities under FLD

Sr. No	Activity	No. of activities organized	Date	Number of participants
1	Field days	1	19/12/08	21
		1	26/12/08	21
		1	06/01/09	12
		1	04/02/09	20
		1	05/02/09	16
		1	05/02/09	17
		1	06/02/09	21
		1	06/02/09	13
	Total	08		141
2 Farmers Training		1	22/10/08	20
		1	03/11/08	12
		1	07/11/08	17
		1	06/12/08	25
		1	20/12/08	18
		1	23/12/08	24
		1	02/01/09	12
		1	04/02/09	24
		1	03/04/09	22
		1	18/05/09	23
		1	25/05/09	12
		1	06/06/09	14
		1	28/06/09	15
		1	29/06/09	17
		1	29/06/09	20
		1	06/08/09	14
		1	11/08/09	10
		1	18/08/09	13
		1	20/08/09	21
	Total	19		335
3	Media coverage			
4	Training for	1	07/11/08	55
	extension	1	17/07/08	25
	functionaries	1	22/07/08	25
		1	24/07/08	69
		1	03/09/09	30
	Total	5		204

#### C. Details of FLD on Enterprises

#### (i) Farm Implements:

Name of the implement	Crop	No. of farmers	Area (ha.)	Performance parameters/ indicators	para in rela techi	a on meter ation to nology astrated	% change in the parameter	Remarks
					Demo	Local check		
Cotton Shredder	Cotton	07	8.80					To boost the farmers to use of crop residue as a compost for next season
Rotavator	Diff. crops	11	30.72					To popularized the use of rotavator
Seed drill	Diff. crops	10	6.40					To boost the farmers to use of seed drill for timely and proper sowing of different crops

### (ii) Livestock Enterprises: Use of mineral mixture for enhancement of milk production of lactating buffalo

Enterprise	Breed	No. of farmers	No. of animals, poultry birds etc.	Performance parameters/ indicators	Data on parameter in relation to technology demonstrated Milk yield (lit/day)		% change in the parameter	Remarks
						Local check		
Livestock	Buffalo (Non Descript)	04	12	Milk Production	10.75	8.41	27.82	

#### (iii) Other Enterprises: Mulching on Summer Groundnut

Sr No	Enterprise	Variety/ breed/ species/ others	No. of farmers	No. of units	Performance parameters/ indicators (Yield evaluation)	Data o in i tec dem	% change in the parameter (Over control)		
	Groundnut		,	Pod Yield Kg/ha	Increase in pod yield (Kg/ha) over control				
1	KVK Farm Nana-	GG-2	01	01	T-1 : Groundnut shell	1875	335	21.75	
	Kandhasar				T-2 : Degradable plastic	1820	280	18.18	
					T-3: Wheat straw	1760	220	14.29	
					T-4 : Cotton stalk	1695	155	10.06	
					T-5 : Control	1540			
2	Navinbhai Vajeshankar	GG-2	01	01	T-1 : Groundnut shell	1920	250	14.97	
	Vajeshankar Vyas		Г		T-2 : Degradable plastic	1890	220	13.17	
			Т			T-3: Wheat straw	1810	120	07.18
					T-4 : Cotton stalk	1760	70	04.19	
					T-5 : Control	1670			

### 3.3 Achievements on Training

# (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit):

#### A) ON Campus

Thematic area	No. of				Pa	rticipa	nts			
	courses		Others	3		SC/ST	•	Gr	and To	tal
		M	F	T	M	F	T	M	F	T
	(.	A) Farı	ners &	Farm	Wome	n				
I Crop Production	4	67	0	67	11	0	11	78	0	78
Weed Management	1	22	0	22	3	0	3	25	0	25
Resource Conservation Technologies	-	-	-	-	-	-	-	-	-	-
Cropping Systems	-	-	-	-	-	-	-	-	-	-
Crop Diversification	-	-	-	-	-	-	-	-	-	-
Integrated Farming	-	-	_	-	-	-	-	_	-	-
Water management	-	-	-	-	-	-	-	_	-	-
Seed production	2	26	0	26	7	0	7	33	0	33
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	1	19	0	19	1	0	1	20	0	20
Fodder production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
II Horticulture	2	8	21	29	2	4	6	10	25	35
a) Vegetable Crops	-	-	-	-	-	-	-	-	-	-
Production of low volume and high value crops	1	6	0	6	2	0	2	8	0	8
Off-season vegetables	-	-	-	-	-	_	-	-	-	-
Nursery raising	-	-	-	-	-	-	-	-	-	-
Exotic vegetables like Broccoli	-	-	-	-	-	-	-	-	-	-
Export potential vegetables	-	-	-	-	-	-	-	-	-	-
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation (Green Houses, Shade Net etc.)	-	-	-	-	-	-	-	-	-	-
b) Fruits	_	_	_	_	_	_	_	_	_	_

Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit	1	2	21	23	0	4	4	2	25	27
Management of young plants/orchards	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
c) Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Nursery Management	-	-	-	-	-	-	-	-	-	-
Management of potted plants	-	-	-	-	-	-	-	-	-	-
Export potential of ornamental plants	-	-	-	-	-	-	-	-	-	-
Propagation techniques of Ornamental Plants	-	-	-	-	-	-	-	-	-	-
d) Plantation crops	-	_	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
e) Tuber crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
f) Spices	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	-	-	-

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Nursery management	-	-	_	-	-	-	-	-	-	-
Production and management technology	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
III Soil Health and Fertility Management	2	42	0	42	6	0	6	48	0	48
Soil fertility management	1	19	0	19	5	0	5	24	0	24
Soil and Water Conservation	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Management of Problematic soils	-	-	-	-	-	-	-	-	-	-
Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient Use Efficiency	-	-	-	-	-	-	-	-	-	-
Soil and Water Testing	1	23	0	23	1	0	1	24	0	24
IV Livestock Production and Management	7	71	0	71	13	O	13	84	0	84
Dairy Management	4	37	0	37	7	0	7	44	0	44
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Disease Management	-	-	-	-	-	-	-	-	-	-
Feed management	3	34	0	34	6	0	6	40	0	40
Production of quality animal products	-	_	-	-	-	-	-	-	-	-
V Home Science/Women empowerment	2	0	20	20	0	5	5	0	25	25
Household food security by kitchen	-	-	_	-	-	-	-	_	_	_

gardening and nutrition gardening										
Design and development of low/minimum cost diet	1	0	12	12	0	0	0	0	12	12
Designing and development for high nutrient efficiency diet	-	-	-	-	-	-	-	-	-	-
Minimization of nutrient loss in processing	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	_	-	_
Income generation activities for empowerment of rural Women	1	0	8	8	0	5	5	0	13	13
Location specific drudgery reduction technologies	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	_	-	-
Women and child care	-	-	-	-	-	-	-	-	-	-
VI Agril. Engineering	3	36	0	36	3	0	3	39	0	39
Installation and maintenance of micro irrigation systems	-	-	-	-	-	-	-	-	-	-
Use of Plastics in farming practices	-	-	-	_	-	-	-	-	-	-
Production of small tools and implements	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Small scale processing and value addition	-	-	-	-	-	-	-	-	-	-
Post Harvest	3	36	0	36	3	0	3	39	0	39

Technology										
VII Plant Protection	4	62	0	62	10	0	10	72	0	72
Integrated Pest Management	3	40	0	40	7	0	7	47	0	47
Integrated Disease Management	1	22	0	22	3	0	3	25	0	25
Bio-control of pests and diseases	-	-	-	-	-	-	-	-	-	-
Production of bio control agents and bio pesticides	-	-	-	-	-	-	-	-	-	-
VIII Fisheries	-	-	-	-	-	-	-	-	-	-
Integrated fish farming	-	-	-	-	-	-	-	-	-	-
Carp breeding and hatchery management	-	-	-	-	-	-	-	-	-	-
Carp fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Hatchery management and culture of freshwater prawn	-	-	-	-	-	-	-	-	-	-
Breeding and culture of ornamental fishes	-	-	-	-	-	-	-	-	-	-
Portable plastic carp hatchery	-	-	-	-	-	-	-	-	-	-
Pen culture of fish and prawn	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Edible oyster farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Fish processing and value addition	-	-	-	-	-	-	-	-	-	-
IX Production of Inputs at site	-	-	-	-	-	-	-	-	-	-
Seed Production	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Bio-agents production	-	-	-	-	-	-	-	-	-	-
Bio-pesticides	-	-	-	-	-	-	-	-	-	-

		(B)	RURA	L YOU	LH.					
TOTAL	24	286	41	286	45	9	54	331	50	381
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Production technologies	-	-	-	-	-	-	-	-	-	-
XI Agro-forestry	-	-	-	-	-	-	-	-	-	-
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	-	-	-	-	-	-	-	-	-	-
Mobilization of social capital	-	-	-	_	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Group dynamics	-	-	-	-	-	-	-	-	-	-
Leadership development	-	-	-	-	-	-	-	-	-	-
X Capacity Building and Group Dynamics	-	-	-	-	-	-	-	-	-	-
Production of Fish feed	-	-	-	-	-	-	-	-	-	-
Production of livestock feed and fodder	-	-	-	-	-	-	-	-	-	-
Small tools and implements	-	-	-	-	-	-	-	-	-	-
Production of Bee- colonies and wax sheets	-	-	-	-	-	-	-	-	-	-
Production of fry and fingerlings	-	-	-	-	-	-	-	-	-	-
Organic manures production	-	-	-	-	-	-	-	-	-	-
Vermi-compost production	-	-	-	-	-	-	-	-	-	-
Bio-fertilizer production	-	-	-	-	-	-	-	-	-	-

Mushroom Productio	-	_	_	_	_	_	_	_	_	_
Bee-keeping	-	_	-	_	_	_	_	_	_	_
Integrated farming	-	-	_	_	_	_	_	-	_	_
Seed production	_	-	_	-	_	_	_	-	_	_
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Integrated Farming	-	-	_	-	-	-	-	_	-	_
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermi-culture	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	1	12	0	12	3	0	3	15	0	15
Nursery Management of Horticulture crops	-	-	-	-	-	-	-	-	-	-
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Value addition	2	0	25	25	0	7	7	0	32	32
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Dairying	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming										
£	-	-	-	-	-	-	-	-	-	_
Piggery	-	-	-	-	-	-	-	-	-	_
			-	-	-	-	-	-	-	-
Piggery	-			- - -					- - -	-
Piggery Rabbit farming	-	-	-		-	-	-	-		
Piggery Rabbit farming Poultry production Ornamental		-	-		-	-	-	-	-	
Piggery Rabbit farming Poultry production Ornamental fisheries	- - -	-	-	-	-	-	-	-	-	-
Piggery Rabbit farming Poultry production Ornamental fisheries Para vets Para extension	- - -	-	-	-		-		-	-	-
Piggery Rabbit farming Poultry production Ornamental fisheries Para vets Para extension workers Composite fish	- - - -	-	-	-	- - - -	-	- - - -	-		-

Pearl culture	-	_	_	_	_	_	_	_	_	_
Cold water fisheries	_	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	1	12	0	12	3	0	3	15	0	15
Nursery Management of Horticulture crops	-	-	-	-	-	-	-	-	-	-
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Value addition	2	0	25	25	0	7	7	0	32	32
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Dairying	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming	_	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	_	-	-
Poultry production	-	-	-	-	-	-	-	_	-	-
Ornamental fisheries	-	-	-	-	-	-	-	-	-	-
Para vets	-	-	-	-	-	-	-	-	-	_
Para extension workers	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling	-	-	-	-	-	-	-	-	-	-

rearing										
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	1	0	15	15	0	8	8	0	23	23
Rural Crafts	-	-	-	-	-	-	-	-	-	-
TOTAL	4	12	40	52	3	15	18	15	55	70
		(C) E <sub>2</sub>	rtensio	n Pers	onnel					
Productivity enhancement in field crops	-	-	-	-	_	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	_	-	_
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	_	_	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers organization	-	-	-	-	-	-	-	-	-	-
Information networking among farmers	-	-	-	-	-	-	-	-	-	-
Capacity building for ICT application	-	-	-	-	-	-	-	-	-	-
Care and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Management in farm animals	-	-	-	-	-	-	-	-	-	-
Livestock feed and fodder production	-	-	-	-	-	-	-	-	-	-
Household food security	-	-	_	_	_	_	-	-	-	-
Women and Child care	1	0	53	53	0	16	16	0	69	69
Low cost and	_	- I	_	_	_	_	_	_	_	_

nutrient efficient diet designing										
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
TOTAL	1	0	53	53	0	16	16	0	69	69
GRAND TOTAL	29	298	134	432	48	40	88	346	174	520

### B) OFF Campus

Thematic area	No. of				Pa	rticipa	ants			
	courses		Others	,		SC/ST	•	G <sub>1</sub>	rand To	tal
		M	F	T	M	F	T	M	F	T
		(A) Fa	rmers	& Farn	ı Wom	en				
I Crop Production	5	60	0	60	13	0	13	73	0	73
Weed Management	1	14	0	14	3	0	3	17	0	17
Resource Conservation Technologies	-	-	-	-	-	-	-	-	-	-
Cropping Systems	-	-	-	-	-	-	-	-	-	_
Crop Diversification	-	-	-	-	-	-	-	-	-	-
Integrated Farming	1	11	0	11	3	0	3	14	0	14
Water management	-	-	-	-	-	-	-	-	-	_
Seed production	2	22	0	22	3	0	3	25	0	25
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	1	13	0	13	4	0	4	17	0	17
Fodder production	-	-	-	-	-	-	-	-	-	_
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
II Horticulture	1	10	0	10	0	0	0	10	0	10
a) Vegetable Crops	-	-	-	-	-	-	-	-	-	-
Production of low volume and high value crops	-	-	-	-	-	-	-	-	-	-
Off-season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	-	-	-	-	-	-	-	-	-	_
Exotic vegetables	-	-	-	_	-	-	-	-	-	_

like Broccoli										
Export potential vegetables	-	-	-	-	-	-	-	-	-	-
Grading and standardization	-	-	-	-	-	-	_	-	_	-
Protective cultivation (Green Houses, Shade Net etc.)	-	-	-	-	-	-	-	-	-	-
b) Fruits	-	-	-	-	_	-	-	-	-	-
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit	1	10	0	10	0	0	0	10	0	10
Management of young plants/orchards	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
c) Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Nursery Management	-	-	-	-	-	-	-	-	-	-
Management of potted plants	-	-	-	-	-	-	-	-	-	-
Export potential of ornamental plants	-	-	-	-	-	-	-	-	-	-
Propagation techniques of Ornamental Plants	-	-	-	-	-	-	-	-	-	-
d) Plantation crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
e) Tuber crops	-	-	-	-	-	-	-	-	-	-
Production and	-	-	-	-	-	-	-	-	-	-

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3.4										
Management technology										
Processing and value addition	-	-	-	-	-	-	-	-	-	-
f) Spices	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Production and management technology	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
III Soil Health and Fertility Management	3	165	0	165	40	O	40	205	0	205
Soil fertility management	-	-	-	-	-	-	-	-	-	-
Soil and Water Conservation	-	-	-	_	-	-	-	-	-	-
Integrated Nutrient Management	2	156	0	156	37	0	37	193	0	193
Production and use of organic inputs	1	9	0	9	3	0	3	12	0	12
Management of Problematic soils	-	-	-	_	-	-	-	-	-	-
Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient Use Efficiency	-	-	-	-	-	-	-	-	-	-
Soil and Water Testing	-	-	-	-	-	-	-	-	-	-
IV Livestock Production and Management	7	66	12	78	11	0	11	77	12	89
Dairy Management	2	18	12	30	2	0	2	20	12	32
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-

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Management										
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Disease Management	3	25	0	25	4	0	4	29	0	29
Feed management	2	23	0	23	5	0	5	28	0	28
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
V Home Science/Women empowerment	7	0	105	105	0	21	21	0	126	126
Household food security by kitchen gardening and nutrition gardening	1	0	16	16	0	0	0	0	16	16
Design and development of low/minimum cost diet	1	0	9	9	0	5	5	0	14	14
Designing and development for high nutrient efficiency diet	-	-	-	-	-	-	-	-	-	-
Minimization of nutrient loss in processing	1	0	14	14	0	5	5	0	19	19
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	1	0	19	19	0	0	0	0	19	19
Income generation activities for empowerment of rural Women	1	0	21	21	0	0	0	0	21	21
Location specific drudgery reduction technologies	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	2	0	26	26	0	11	11	0	37	37
VI Agril. Engineering	5	60	0	60	12	0	12	72	0	72
Installation and maintenance of micro irrigation	-	-	-	-	-	-	-	-	-	-

systems										
Use of Plastics in farming practices	_	-	-	-	-	-	-	-	-	-
Production of small tools and implements	2	23	0	23	3	0	3	26	0	26
Repair and maintenance of farm machinery and implements	2	26	0	26	5	0	5	31	0	31
Small scale processing and value addition	1	11	0	11	4	0	4	15	0	15
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
VII Plant	6	88	0	88	22	0	22	110	0	110
Protection										
Integrated Pest Management	3	42	0	42	8	0	8	50	0	50
Integrated Disease Management	3	46	0	46	14	0	14	60	0	60
Bio-control of pests and diseases	-	-	-	-	-	-	-	-	-	-
Production of bio control agents and bio pesticides	-	-	-	-	-	-	-	-	-	-
VIII Fisheries	-	-	-	_	-	-	-	-	-	_
Integrated fish farming	-	-	-	-	-	-	-	-	-	_
Carp breeding and hatchery management	-	-	-	-	-	-	-	-	-	-
Carp fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	_
Hatchery management and culture of freshwater prawn	-	-	-	-	-	-	-	-	-	-
Breeding and culture of ornamental fishes	-	-	-	-	-	-	-	-	-	-
Portable plastic carp hatchery	-	-	-	-	-	-	-	-	_	_
Pen culture of fish and prawn	_	-	-	-	-	-	-	-	-	-
Shrimp farming	_	-	-	-	-	-	-	-	-	-

Edible oyster										
farming	-	-		-	-	-	-	-	-	-
Pearl culture	-	-	_	-	-		_	-	_	_
Fish processing and value addition	-	-	-	-	-	-	-	-	-	-
IX Production of Inputs at site	-	-	-	-	-	-	-	-	-	-
Seed Production	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Bio-agents production	-	-	-	-	-	-	-	-	-	-
Bio-pesticides production	-	-	-	-	-	-	-	-	-	-
Bio-fertilizer production	-	-	-	-	-	-	-	-	-	-
Vermi-compost production	-	-	-	-	-	-	-	-	-	-
Organic manures production	-	-	-	-	-	-	-	-	-	-
Production of fry and fingerlings	-	-	-	-	-	-	-	-	-	-
Production of Bee- colonies and wax sheets	-	-	-	-	-	-	-	-	-	-
Small tools and implements	-	-	-	-	-	-	-	-	-	-
Production of livestock feed and fodder	-	-	-	-	-	-	-	-	-	-
Production of Fish feed	-	-	-	-	-	-	-	-	-	-
X Capacity Building and Group Dynamics	-	-	-	-	-	-	-	-	-	-
Leadership development	-	-	-	-	-	-	-	-	-	-
Group dynamics	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Mobilization of social capital	_	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	-	-	-	-	-	-	-	-	-	-
WTO and IPR issues	-	-	-	-	-	-	-	-	_	_

XI Agro-forestry	-	-	-	-	-	-	-	-	-	-
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
XII Extension Education	3	49	0	49	10	0	10	59	0	59
TOTAL	37	498	117	615	108	21	129	606	138	744
		()	B) RUR	AL YO	UTH					
Mushroom Production	-	-	-	-	-	-	-	-	-	-
Bee-keeping	_	-	-	-	-	-	-	-	-	-
Integrated farming	2	35	0	35	8	0	8	43	0	43
Seed production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	_
Integrated Farming	_	-	-	-	-	-	-	-	-	_
Planting material production	_	-	-	-	-	-	-	-	-	-
Vermi-culture	-	-	-	-	-	-	-	-	-	_
Sericulture	_	-	-	-	-	-	-	-	-	_
Protected cultivation of vegetable crops	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	2	0	39	39	0	7	7	0	46	46
Repair and maintenance of farm machinery and implements	2	42	0	42	6	0	6	48	0	48
Nursery Management of Horticulture crops	1	11	0	11	4	0	4	15	0	15
Training and pruning of orchards	1	10	0	10	0	0	0	10	0	10
Value addition	1	0	18	18	0	0	0	0	18	18
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Dairying	1	10	0	10	2	0	2	12	0	12
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-

Piggery	_		_		_				_	_
Rabbit farming	_		_	_	_	_	_	_	_	_
Poultry production	_		_		_	_	_		_	_
	_	-	_	_	-	-	-	-	-	-
Ornamental fisheries	-	-	-	-	-	-	-	-	-	-
Para vets	-	-	-	-	-	-	-	-	-	-
Para extension workers	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	_
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
TOTAL	10	108	57	165	20	7	27	128	64	192
		(C) I	Extens	ion Per	rsonne	1				
Productivity enhancement in field crops	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-	_
Integrated Nutrient management	4	112	0	112	23	0	23	135	0	135
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers	-	-	-	-	-	-	-	-	-	-

GRAND TOTAL	51	718	174	892	151	28	178	869	202	1071
TOTAL	4	112	0	112	23	0	23	135	0	135
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Low cost and nutrient efficient diet designing	-	-	-	-	-	-	-	-	-	-
Women and Child care	-	-	-	-	-	-	-	-	-	-
Household food security	-	-	-	-	-	_	-	-	-	_
Livestock feed and fodder production	-	-	-	-	-	-	-	-	-	-
Management in farm animals	-	-	-	-	-	-	-	-	-	-
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Care and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Capacity building for ICT application	-	-	-	-	-	-	-	-	-	-
Information networking among farmers	-	-	-	-	-	-	-	-	-	-
organization										

#### C) Consolidated table (ON and OFF Campus)

Thematic area	No. of				Pa	rticipa	ants			
	course		Other	s		SC/S	T	G	rand To	otal
		M	F	T	M	F	T	M	F	T
		(A)	Farme	rs & Faı	m Wor	nen				
I Crop Production	9	127	0	127	24	0	24	151	0	151
Weed Management	2	36	0	36	6	0	6	42	0	42
Resource Conservation Technologies	-	-	-	-	-	-	-	-	-	-
Cropping Systems	-	-	-	-	-	-	-	-	-	-
Crop Diversification	-	-	-	-	-	-	-	-	-	-
Integrated Farming	1	11	0	11	3	0	3	14	0	14
Water management	-	-	-	-	-	-	-	-	-	-
Seed production	4	48	0	48	10	0	10	58	0	58
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	2	32	0	32	5	0	5	37	0	37
Fodder production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
II Horticulture	3	18	21	39	2	4	6	20	25	45
a) Vegetable Crops	-	-	-	-	_	-	_	-	_	-
Production of low volume and high value crops	1	6	0	6	2	0	2	8	0	8
Off-season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	-	-	-	-	-	-	-	-	-	-
Exotic vegetables like Broccoli	-	-	-	-	-	-	-	-	-	-
Export potential vegetables	-	-	-	-	-	-	_	-	-	-
Grading and standardization	-	-	-	-	-	_	_	-	-	-
Protective cultivation (Green Houses, Shade Net etc.)	-	-	-	-	-	-	-	-	-	-

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b) Fruits	-	-	-	_	-	-	-	_	-	-
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	_
Cultivation of Fruit	2	12	21	33	0	4	4	12	25	37
Management of young plants/orchards	-	-	-	-	-	-	-	-	-	_
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	_	-	-	_
c) Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Nursery Management	-	-	-	-	-	-	-	-	-	-
Management of potted plants	-	-	-	-	-	-	-	-	-	-
Export potential of ornamental plants	-	-	-	-	-	-	-	-	-	_
Propagation techniques of Ornamental Plants	-	-	-	-	-	-	-	-	-	-
d) Plantation crops	-	_	-	-	-	-	-	_	-	-
Production and Management technology	-	-	-	_	_	-	-	-	_	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
e) Tuber crops	-	-	-	_	_	-	-	-	-	_
Production and Management technology	-	-	-	-	-	_	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
f) Spices	-	-	-	-	-	-	-	-	-	-

Production and Management	-	-	-	-	_	-	-	-	_	-
Processing and value addition	_	_	_	_	_	_	_	_	_	-
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Production and management technology	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
III Soil Health and Fertility Management	5	207	0	207	46	0	46	253	0	253
Soil fertility management	1	19	0	19	5	0	5	24	0	24
Soil and Water Conservation	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	2	156	0	156	37	0	37	193	0	193
Production and use of organic inputs	1	9	0	9	3	0	3	12	0	12
Management of Problematic soils	_	-	-	-	-	-	-	_	-	_
Micro nutrient deficiency in crops	-	-	-	_	-	-	-	-	-	-
Nutrient Use Efficiency	-	-	-	-	-	-	-	-	-	-
Soil and Water Testing	1	23	0	23	1	0	1	24	0	24
IV Livestock Production and Management	14	137	12	149	24	0	24	161	12	173
Dairy Management	6	55	12	67	9	0	9	64	12	76
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-

Disease Management	3	25	0	25	4	0	4	29	0	29
Feed management	5	57	0	57	11	0	11	68	0	68
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
V Home Science/Women empowerment	9	0	125	125	0	26	26	0	151	151
Household food security by kitchen gardening	1	0	16	16	0	0	0	0	16	16
Design and development of low/minimum cost diet	2	0	21	21	0	5	5	0	26	26
Designing and development for high nutrient efficiency diet	-	-	-	-	-	-	-	-	-	-
Minimization of nutrient loss in processing	1	0	14	14	0	5	5	0	19	19
Gender mainstreaming through SHGs	-	-	-	_	-	-	-	-	-	_
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	1	0	19	19	0	0	0	0	19	19
Income generation activities for empowerment of rural Women	2	0	29	29	0	5	5	0	34	34
Location specific drudgery reduction technologies	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	2	0	26	26	0	11	11	0	37	37
VI Agril. Engineering	8	96	0	96	15	0	15	111	0	111
Installation and maintenance of MI systems	-	-	-	_	-	-	-	-	-	-
Use of Plastics in	-	-	-	-	-	-	-	-	-	-

farming practices										
Production of small tools and implements	2	23	0	23	3	0	3	26	0	26
Repair and maintenance of farm machinery and implements	2	26	0	26	5	0	5	31	0	31
Small scale processing and value addition	1	11	0	11	4	0	4	15	0	15
Post Harvest Tech	3	36	0	36	3	0	3	39	0	39
VII Plant Protection	10	150	0	150	32	0	32	182	0	182
Integrated PM	6	82	0	82	15	0	15	97	0	97
Integrated Disease Management	4	68	0	68	17	0	17	85	0	85
Bio-control of pests and diseases	-	-	-	-	-	-	-	-	-	-
Production of bio control agents and bio pesticides	-	-	-	-	-	-	-	-	-	-
VIII Fisheries	-	-	-	-	-	-	-	-	-	-
Integrated fish farming	-	-	-	-	-	-	-	-	-	-
Carp breeding and hatchery management	-	-	-	-	-	_	-	-	-	_
Carp fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	_	-	-	-	_	-	-	-	-
Hatchery management	-	-	-	-	-	_	-	-	-	-
Breeding and culture of ornamental fishes	-	-	-	-	-	-	-	-	-	-
Portable plastic carp hatchery	-	-	-	-	-	-	-	-	-	-
Pen culture of fish and prawn	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Edible oyster farming	-	-	-	-	_	-	-	-	-	-

Pearl culture	-	-	-	-	-	-	-	-	-	_
Fish processing and value addition	-	-	-	-	-	-	-	-	-	-
IX Production of Inputs at site	-	-	-	-	-	-	-	-	-	-
Seed Production	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Bio-agents production	-	-	-	-	-	-	-	-	-	-
Bio-pesticides production	-	-	-	-	-	-	-	-	-	-
Bio-fertilizer production	-	-	-	-	-	-	-	-	-	-
Vermi-compost production	-	-	-	-	-	-	-	-	-	-
Organic manures production	-	-	-	-	-	-	-	-	-	-
Production of fry and fingerlings	-	-	-	-	-	-	-	-	-	-
Production of Bee-colonies and wax sheets	_	-	-	-	-	-	-	-	-	-
Small tools and implements	-	-	-	-	-	-	-	-	-	-
Production of livestock feed and fodder	-	-	-	-	-	-	-	-	-	-
Production of Fish feed	-	-	-	-	-	-	-	-	-	-
X Capacity Building and Group Dynamics	-	-	-	-	-	-	-	-	-	-
Leadership development	-	-	-	-	-	-	-	-	-	-
Group dynamics	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	-	-	-	-	-	-	-	-	-	-
WTO and IPR	-	-	-	-	-	-	-	-	-	-

issues										
XI Agro-forestry	_	-	-	-	-	-	-	-	-	-
Production technologies	-	-	-	-	-	-	-	-	-	_
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
XII EXTENSION EDUCATION	3	49	0	49	10	0	10	59	0	59
TOTAL	61	784	158	942	153	30	183	937	188	1125
			(B) R	URAL Y	OUTH					
Mushroom Production	-	-	-	_	-	-	-	_	-	-
Bee-keeping	-	-	_	_	_	_	-	-	-	-
Integrated farming	2	35	0	35	8	0	8	43	0	43
Seed production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Integrated Farming	-	-	-	-	-	-	-	_	-	-
Planting material production	_	-	-	_	-	_	-	_	-	_
Vermi-culture	_	-	-	-	-	-	-	-	-	-
Sericulture	_	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	2	0	39	39	0	7	7	0	46	46
Repair and maintenance of farm machinery and implements	3	54	0	54	9	0	9	63	0	63
Nursery Management of Horticulture crops	1	11	0	11	4	0	4	15	0	15
Training and pruning of orchards	1	10	0	10	0	0	0	10	0	10
Value addition	3	0	43	43	0	7	7	0	50	50
Production of quality animal products	-	-	-	-	-	_	-	-	-	-

Dairying	1	10	0	10	2	0	2	12	0	12
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	-	-	-
Poultry production	-	-	-	-	-	-	-	-	-	-
Ornamental fisheries	-	-	-	-	-	-	-	-	-	-
Para vets	-	-	-	-	-	-	-	-	-	-
Para extension workers	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	1	0	15	15	0	8	8	0	23	23
Rural Crafts	-	-	-	-	-	-	-	-	-	-
TOTAL	14	120	97	217	23	22	45	143	119	262

#### (C) Extension Personnel

Productivity enhancement in field crops	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient management	4	112	0	112	23	0	23	135	0	135

GRAND TOTAL	80	1016	308	1324	199	68	267	1215	376	1591
TOTAL	5	112	53	165	23	16	39	135	69	204
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Low cost and nutrient efficient diet designing	-	-	-	-	-	-	-	-	-	-
Women and Child care	1	0	53	53	0	16	16	0	69	69
Household food security	-	-	-	-	-	-	-	-	-	-
Livestock feed and fodder production	-	-	-	-	-	-	-	-	-	-
Management in farm animals	-	-	-	-	-	-	-	-	-	-
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Care and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Capacity building for ICT application	-	-	-	-	-	-	-	-	-	-
Information networking among farmers	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers organization	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	_	-	-	-	-	-	-	-	-	-

## Note: Please furnish the details of above training programmes as Annexure in the proforma given below

		Title of the training programme			ä	(Off / On	oth		of ants	Nu <sub>1</sub>	nber 'ST	of		al nber ticipa	
Date	Clientele		Discipline	Thematic area	Duration in davs	Ca mp us)	Male	Female	Total	Male	Female	Total	Male	Female	Total
Far	rme	rs and Farm	women												
21/10/08	Farm women	Efficient use of fertilizer and pesticides to reduce cost of cultivation	Crop Prod.		1	Off	60	-	60	20	-	20	80	-	80
22/10/08	Farmers and F	Improved cultivation practices for wheat & cumin	Crop Prod.		1	On	19	-	19	1	-	1	20	-	20
03/11/08	H	Integrated weed management in major rabi field corps	Crop Prod		1	Off	12	-	12	3	-	3	15	-	15
07/11/08		Plant protection measures in castor and mustard crops	Plant Protection		1	Off	16	-	16	1	-	1	17	-	17
06/12/08		Plant protection measures for pest and disease in cumin	Plant Protection		1	On	22	-	22	3	-	3	25	-	25
20/12/08		Efficient water management in major Rabi crops	Crop Prod		1	Off	14	-	14	4	-	4	18	-	18
23/12/08		Control measures for pest and disease in cumin and wheat	Plant Protection		1	Off	20	-	20	4	-	4	24	-	24

02/01/09	Production technology of summer groundnut	Crop Prod	 1	Off	11	-	11	1	-	1	12	-	12
05/01/09	Care and management of animals during winter	Animal Science	 1	On	12	-	12	2	-	2	14	-	14
06/01/09	Care and management of milch animal	Animal Science	 1	Off	14	-	14	2	-	2	16	-	16
06/01/09	Importance of green leafy vegetable in diet and preparing recipes from vegetables	Home Science	 1	Off	-	9	9	-	5	5	-	14	14
12/01/09	Organic residue and farm waste management	Soil Health & Fertility Mgmt	 1	On	19	-	19	5	-	5	24	-	24
17/01/09	Foot and mouth disease and its control	Animal Science	 1	Off	8	-	8	2	-	2	10	-	10
20/01/09	Training on rubi crop management	Crop Prod	 1	Off	22	-	22	3	-	3	25	-	25
30/01/09	Selection of pure breads of animal for economic milk production	Animal Science	 1	On	15	-	15	3	-	3	18	-	18
02/05/06	Awareness about extension activities of KVK	Ext. Education	 1	Off	16	-	16	4	-	4	20	-	20
13/02/09	Training on role women in agriculture	Crop Prod	 1	On	-	23	23	-	4	4	-	27	27

15/03/09	Value addition in anola	Home Science	 1	On	-	19	19	-	-	-	-	19	19
20/03/09	Milk and milk product preparation	Home Science	 1	On	-	8	8	-	5	5	-	13	13
20/03/09	Integrated nutrient management of field crop	Crop Prod	 1	Off	91	-	91	17	-	17	108	-	108
23/03/09	Formation of Kishan clubs	Ext. Education	 1	Off	12	-	12	3	-	3	15	-	15
03/04/09	Importance of IPM	Plant Protection	 1	On	19	-	19	3	-	3	22	-	22
06/04/09	Soil sampling methods	Soil Health & Fertility Mgmt	 1	On	23	-	23	1	-	1	24	-	24
23/04/09	Importance of colostrums in calves	Animal Science	 1	On	15	-	15	-	-	-	15	-	15
24/04/09	Care and management of Calves	Animal Science	 1	Off	14	-	14	-	-	-	14	-	14
05/05/09	Urea treatment in wheat straw	Animal Science	 1	Off	11	-	11	3	-	3	14	-	14
02/02/09	Selection and maintenance of pump set	Agril. Engg.	 1	Off	12	-	12	2	-	2	14	-	14

			-	-									
07/05/09	Increase nutritive value of low quality Roughage	Animal Science	 1	On	11	-	11	4	-	4	15	-	15
11/05/09	Use of mineral mixture for balance feeding	Animal Science	 1	Off	9	-	9	2	-	2	11	-	11
25/05/09	Production technology of major arid fruit crops	Horticultu re	 1	Off s	10	-	10	-	-	-	10	-	10
28/05/09	Production technology of cotton and groundnut	Crop Productio n	 1	On	17	-	17	6	-	6	23	-	23
28/05/09	IPM in cotton	Plant Protection	 1	On	9	-	9	3	-	3	12	-	12
29/05/09	Improved cultivation practices for vegetables includes onion & garlic	Horticultu re	 1	On	6	-	6	2	-	2	8	-	8
02/06/09	Efficient use of harvested water	Agril. Engg.	 1	Off	10	-	10	2	-	2	12	-	12
60/90/90	Pure seeds production technique in sesame and groundnut	Crop Prod	 1	Off	12	-	12	2	-	2	14	-	14
11/06/09	Care and management of buffalo during summer	Animal Science	 1	On	10	-	10	2	-	2	12	-	12
17/06/09	In-situ moisture conservation practices in dry farming	Agril. Engg.	 1	On	15	-	15	-	-	-	15	-	15

23/06/09	Preparation and preservation of mango	Home Science	 1	Off	-	14	14	-	5	5	-	19	19
29/06/09	economic use of fertilizer in major kharif field crops	Soil Health & Fertility Mgmt	 1	Off	14	-	14	3	-	3	17	-	17
29/06/09	Management of pest and disease of sesamum	Plant Protection	 1	Off	15	-	15	5	-	5	20	-	20
29/06/09	IPM in Groundnut	Plant Protection	 1	Off	9	-	9	6	-	6	15	-	15
20/07/09	Nutrition management in mother and child	Home Science	 1	Off	-	14	14	-	-	-	-	14	14
24/07/09	IPM in Vegetables	Plant Protection	 1	Off	11	-	11	2	-	2	13	-	13
28/07/09	health care of live Stock during monsoon	Animal Science	 1	Off	12	-	12	-	-	-	12	-	12
31/07/09	Importance and use of green fodder in milk production	Animal Science	 1	On	8	-	8	2	-	2	10	-	10
03/08/09	supplementary nutrition for child and pregnant mother	Home Science	 1	Off	-	12	12	-	11	11	-	23	23
60/80/90	Importance of thinning, gap filling and maintenance of plant population in major kharif crops	Crop Prod	 1	Off	11	-	11	3	-	3	14	-	14

11/08/09	Castor production technology	Crop Prod	 1	On	9	-	9	1	-	1	10	-	10
12/08/09	kitchen gardening	Home Science	 1	Off	-	16	16	-	-	-	-	16	16
17/08/09	Preparation technology of locally available vegetable and fruits	Home Science	 1	On	-	12	12	-	-	-	-	12	12
17/08/09	preventive measures and first aid treatment of important disease in dairy animals	Animal Science	 1	Off	10	-	10	2	-	2	12	-	12
18/08/09	IPM in castor	Plant Protection	 1	On	12	-	12	1	-	1	13	-	13
20/08/09	Rain water management technology	Agril. Engg.	 1	On	11	-	11	1	-	1	12	-	12
20/08/09	Control measures for pest and disease of kharif pulses	Plant Protection	 1	Off	17	-	17	4	-	4	21	-	21
21/08/09	government subsidy scheme in agriculture	Ext. Education	 1	Off	21	-	21	3	-	3	24	-	24
28/08/09	fancy patch work, hand work, stitches and knifing work	Home Science	 1	Off	-	21	21	-	-	-	-	21	21
28/08/09	Introduction of effective and improved agricultural equipments	Agril. Engg.	 1	Off	10	-	10	1	-	1	11	-	11

28/08/09		Farm implements and their use	Agril. Engg.	 1	Off	13	1	13	2	-	2	15	-	15
29/08/09		Selection and maintenance of pump set	Agril. Engg.	 1	Off	14	-	14	3	-	3	17	-	17
01/09/09		Introduction and use of chaff cutter	Agril. Engg.	 1	Off	11	-	11	4	-	4	15	-	15
		61		 		1 5 8	9 4 2	1 5 3	3	1 8 3	9 3 7	1 8 8	1 1 2 5	1 3 1 3
				Rura	l Youth									
17/12/08	Rural Youth	Value addition in groundnut	Home Science	 1	Off	-	18	18	-	-	-	-	18	18
02/01/09	<b>X</b>	Low cost technology for higher milk production	Animal Science	 1	On	12	-	12	-	-	-	12	-	12
04/05/09		Selection of chemical pesticides	Plant Protection	 1	Off	20	-	20	4	-	4	24	-	24
04/05/09		Introduction to new developed farm implements and their use	Agril. Engg.	 1	Off	21	-	21	3	-	3	24	-	24
06/02/09		Precautions while handling pesticides	Plant Protection	 1	Off	15	-	15	2	-	2	17	-	17
16/02/08		Government subsidy in drips, sprinkler and agril implements	Ext. Education	 1	On	12	-	12	3	-	3	15	-	15

04/03/09	Preparation of enrich compost	Soil Health & Fertility Mgmt	 1	Off	9	-	9	3	-	3	12	-	12
07/03/09	Preparation of squash making for fruit preservation	Home Science	 1	Off	-	24	24	-	7	7	-	31	31
16/03/09	Tomato preservation	Home Science	 1	Off	-	15	15	-	-	-	-	15	15
22/04/09	Importance of artificial insemination in animals	Animal Science	 1	Off	10	-	10	2	-	2	12	-	12
12/05/09	Importance of floriculture	Horticultu re	 1	Off	11	-	11	4	-	4	15	-	15
15/07/09	Nutrition education	Home Science	 1	On	-	18	18	-	-	-	-	18	18
04/08/09	Training on bag, candle and agar batty making	Home Science	 1	On	-	15	15	-	8	8	-	23	23
02/08/06	Mixed pickle preparation from seasonal vegetable	Home Science	 1	On	-	7	7	-	7	7	-	14	14
	14				1 2 0	9 7	2 1 7	2 3	2 2	4 5	1 4 3	1 1 9	2 6 2

				Ex	tensior	Person	nel:								
07/11/08	Personnel	Pre-Seasonal training on Rabi crops	Crop Prod		1	Off	45	0	45	10	0	10	55	0	55
17/07/09	Extension	Pre-Seasonal training on Kharif crops	Crop Prod		1	Off	23	0	23	2	0	2	25	0	25
22/07/09		Cotton production technology	Crop Prod		1	Off	22	0	22	3	0	3	25	0	25
24/07/09		Nutrition management of children, pregnant mother and role of angawadi worker	Home Science		1	On	0	53	53	0	16	16	0	69	69
60/60/80		Oilseed crops production technology	Crop Prod		1	Off	22	0	22	8	0	8	30	0	30
		5					1 1 2	5	1 6 5	2 3	1 6	3 9	1 3 5	6 9	2 0 4
		80					1 0 1 6	3 0 8	1 3 2 4	1 9 9	6 8	2 6 7	1 2 1 5	3 7 6	1 5 9 1

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#### D) Vocational training programmes for Rural Youth:

/ ise		<b>8</b> .				No. o		Self er	nployed aft	er training	Number of
Crop / Enterprise	Date	Training title*	Identified Thrust Area	Duration (days)	M	F	т	Type of units	Number of units	Number of persons employed	persons employed else where
	12-15 /01/09	Fruits and vegetables preservation	Preservation	03		30	30	-	-	-	-
Home Science	13/08/09	Embroidery and sieving	Income generation	01		30	30	-	-	-	-
	60/60/80	Preparation of milk product "Mava"	Income generation	01		11	11	-	-	-	-
Plant Protection	18/06/09	Repair and maintenance of sprayer, power sprayer and duster	Income generation	01	25		25	-	-	-	-
Crop Productio Animal Science	29/08/09	Dairy farming	Income generation	01	13		13	-	-	-	-
Crop Productio	12/09/09	Technique for vermi composting	Income generation	01	20	0	20	-	-	-	-
		Total		08	58	71	129	-	-	-	-

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#### E) Sponsored Training Programmes

										No.	of P	arti	cipa	nts			
s	D		INE	tic	uo (	t EF	- S	0	the	rs	S	C/S	T	1	<b>Cot</b> a	1	Spons
1. N o	a t e	Title	DISCIPLINE	Thematic area	Duration (days)	Client (PF/RY/EF	No. of courses	M	F	Т	M	F	Т	M	F	Т	oring Agenc y
1	21/10/08	Efficient use of fertilizer and pesticides to reduce cost of cultivation	Crop Production		1	F	1	60	0	60	20	0	20	80	0	80	KRIBH CO Surend ranagar
2	20-01-09	Training on rabi crop managem ent	Crop Production		1	F	1	22	0	22	3	0	3	25	0	25	FTC Rajkot
3	13-02-09	Training on role of women in agricultur e	Ext. Education		1	FW	1	0	23	23	0	4	4	0	27	27	FTC Rajkot
4	20-03-09	Integrated nutrient managem ent of field crop	Crop Production		1	F	1	91	0	91	17	0	17	108	0	108	GNFC Surendr anagar
		Total			4		4	1 7 3	2 3	1 9 6	4 0	4	4 4	2 1 3	2 7	2 4 0	

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### 3.4. Extension Programmes (including activities of FLD programmes)

<b>ئ</b> ت	٥.,	Ø	Participants											
Nature of Extension Activity	Purpose /topic Date	No. of ctivities		ırme hers			SC/S rmer	ST :s)(II)		tens cials	ion ; (III)		rand To (I+II+I)	
Na Ex Ac	፫ _	act	M	F	T	M	F	T	M	F	T	M	F	T
Day	Cotton 19.12.08	1	18	0	18	03	0	03	-	-	-	21	0	21
Field Day	Cotton 26.12.08	1	17	0	17	04	0	04	-	-	-	21	0	21
	Mustard 06.01.09	1	11	0	11	01	0	01	-	-	-	12	0	12
	Cumin 04.02.09	1	18	0	18	02	0	02	-	-	-	20	0	20
	Mustard 05.02.09	1	14	0	14	02	0	02	-	-	-	16	0	16
	Gram 05.02.09	1	14	0	14	03	0	03	-	-	-	17	0	17
	Cumin 06.02.09	1	19	0	19	02	0	02	-	-	-	21	0	21
	Wheat 06.02.09	1	13	0	13	0	0	0	-	-	-	13	0	13
Total		08	124	0	124	17	0	17	-	-	-	141	0	141
Kisan I	Mela													
Kisan (	Ghosthi	06	-	-	-	-	-	-	-	-	-	133	0	133
Exhibit (Mahila Mela)		01	-	-	-	-	-	-	5	0	5	45	160	205
Film Sl	now	01	-	-	-	-	-	-	-	-	-	0	37	37
Method Demon	l strations	-	-	-	-	-	-	-	-	-	-	-	-	-
Farmer	rs Meeting	07	-	-	-	-	_	-	15	0	15	244	42	286
Khedut	Shibir	04	-	-	-	-	-	-	-	-	-	277	0	277
Night N	Meeting	10	-	-	-	-	-	-	-	-	-	206	63	269
Worksl	пор	-	-	-	-	-	-	_	-	-	_	-	-	-
Group	meetings	08	_	-	-	-	-	_	-	-	-	62	0	62
Lecture delivere resource		04	-		-	-	-	-	120	0	120	120	0	120
Newspa coverag	_	15	-	-	-	-	-	-	-	-	-	-	-	-
Radio t	alks	-	-	-	-	-	-	-	-	-	-	-	-	-

,

PDV 7													
TV talks	-	-	-	-	-		-	-		-	-	-	-
Popular articles	-	-	_	-	-	-	-	-	-	-	-	-	-
Extension Literature	02	-	-	-	-	-	-	-	-	-	-	-	-
Advisory Services	76	-	-	-	-	-	-	-	-	-	-	-	-
Scientific visit to farmers field	24	-	-	-	-	-	-	-	-	-	-	-	-
Farmers visit to KVK	27	-	-	-	-	-	-	-	-	-	277	188	465
Diagnostic visits	54	-	_	-	-	-	-	-	-	-	-	-	-
Exposure visits	-	_	-	_	-	-	-	-	-	-	-	-	-
Ex-trainees Sammelan	-	-	-	-	-	-	-	-	-	-	-	-	-
Soil health Camp	-	-	-	-	-	-	-	-	-	-	-	-	-
Animal Health Camp	03	-	-	-	-	-	-	-	-	-	-	-	-
Agrimobile clinic	-	-	-	-	-	-	-	-	-	-	-	_	-
Soiltest campaigns	-	-	-	-	-	-	-	-	-	-	-	-	-
Farm Science Conveners meet	-	-	-	-	-	-	-	-	-	-	-	-	-
SHG Conveners meetings	-	-	-	-	-	-	-	-	-	-	-	-	-
Mahila Mandals Conveners meetings	-	-	-	-	-	-	-	-	-	-	-	-	-
Celebration of important days (Mamata Day)	01	-	-	-	-	-	-	-	-	-	-	-	-
Grand Total		124	0	124	17	0	17	140	0	140	1396	474	1870

# 3.5 Production and supply of Technological products SEED MATERIALS:

Major group/class	Crop	Variety	Quantity (Kg.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	-	-	-	-	-
OILSEEDS	Groundnut	GG-20	300	13700	10
PULSES	-	-	-	-	-
VEGETABLES	-	-	-	-	-
FLOWER CROPS	-	-	-	-	-
OTHERS (Specify)	-	-	-	-	-

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#### **SUMMARY**

S1. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS	-	-	-
2	OILSEEDS	300	13700	10
3	PULSES	-	-	-
4	VEGETABLES	-	-	-
5	FLOWER CROPS	-	-	-
6	OTHERS	-	-	-
	TOTAL	300	13700	10

#### PLANTING MATERIALS :NIL

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS	-	-	-	-	-
SPICES	-	-	-	-	-
VEGETABLES	-	-	-	-	-
FOREST SPECIES	-	-	-	-	-
ORNAMENTAL CROPS	-	-	-	-	-
PLANTATION CROPS	-	-	-	-	-
Others (specify)	-	-	-	-	-

**BIO-PRODUCT: NIL** 

LIVESTOCK: NIL

#### 3.6.Literature Developed/Published (with full title, author & reference)

(A) KVK News Letter: nil

(B) Literature developed/published

Item	Title	Authors name	Number of copies
pers	Hetreosis in sesame (Sesame indicum L.)	Javia R.M., Pandya H.M. and Dhaduk H.L.	
Research papers	Response of jatropha curcas grown on wasteland to nitrogen and phosphorus fertilization	Bhuva H.M., Chaudhari D.R., Chikara J., Parmar D.R. and Patolia J.S.	
Re	Effect of nutrient management in sesame on sulphur and micronutrient availability in sandy loam soil	Suratria G.S., Vora V.D., Javia R.M., Akbari K.N. and Padmani D.R.	
	Effect of nutrient management on sesame yield and post harvest soil fertility in sandy loam soils	Akbari K.N., Sutaria G.S., Javia R.M., Vora V.D. and Padmani D.R.	
	Identification of technological needs and problems of farmers in Agril. Entomology	Bochly B.C., Javia R.M., Bharadiya A.M. and Bhuva H.M.	
Total	05		
lers	Surendranagar jilanu krushi mandir	Kabariya B.B. and Javia R.M.	1000
Leaflets/folders	Suki khetima vadhare pak utpadan kevi rite Medavasho	Bhuva H.M. and Javia R.M.	1000
Leafl	Kapasma jivato tatha rogoni niyantran vyavatha	Bharadiya A.M. and Javia R.M.	1000
	Vadhu dudha utpadan kem midavasho	Tajapar M.M. amd Javia R.M.	1000
	Jal sangrah ane teni vividh paddhatio	Prajapati G.V. and Javia R.M.	1000
	Khedut mahilao ane poshhankhham aahar	Bhalala B.M. and Javia R.M.	1000
Total	06		6000

#### (C) Details of Electronic Media Produced:

Sr. No.	Type of media (CD / VCD / DVD / Audio- Cassette)	Title of the programme	Number

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#### 3.7. Success stories/Case studies

#### 1) Adaptation of new high yielding variety of wheat

1. Name of farmer : Bharatbhai Jayamalbhai Jadav

2. Name of village : Dhedhuki (Sayala)

3. District : Surendranagar

Wheat is the staple food grain for Gujarat. It is monocot self pollinated crop grown during the rabi season. *Triticum aestivum* is grown as bread wheat in Gujarat. For the increasing population it is essential to grow more food grains to meet the requirement of the growing population. But land is a limiting factor hence it's productivity will be depends on high yielding varieties. The average productivity of wheat in Gujarat state is very low and also in the district. In Surendranagar district wheat is grown in 23900 ha area with average productivity is 2200 Kg/ha. The productivity of wheat can be enhance by using recently release GW-366 variety so FLD conducted on this particular technology.

Shri Bharatbhai Jayamalbhai Jadav is a farmer of the Dhedhuki village of Sayala Taluka, his name comes in the category of progressive farmer of the village. He grows mostly wheat in rabi season taking old one variety like GW-496/Loc-1 etc. A FLD of wheat variety GW-366 was conducted on his field during year-2008-09 against the local check GW-496. The new variety GW-366 shows better yield as compared to GW-496, he told approximately 10 % yield was increase due to adoption of this variety.

**IMPACT:** Due to 10 % increase in yield by adopting GW-366 variety over GW-496. The economic gain automatically seen by the result as well as by the farmer responses. The farmer further told during the discussion during the field day with KVK staff and other farmers, that it is a bold seeded variety and backing quality also very good, hence the farmer said that an average almost farmers seen the crop and demanding the seed of this variety. KVK staff encourages him to keep the seed of this variety for distribution among the other farmers of village.

#### 2) Adaptation of disease resistance variety of cumin

1. Name of farmer : Jethabhai Jerambhai Zala

2. Name of village : Vijadiya (Chotila)3. District : Surendranagar

The area of cumin in the district increasing recently, since two to three year. The climate and high remunerative price is also suitable to the crop. Cumin is winter season crop. The RH remains higher during the growing season which favored the cumin disease like blight, wilt and powdery mildew. Recently, Guj. Cumin-4 variety has been found resistant against wilt and therefore it is recommended for the cultivation.

Shri Jethabhai is progressive farmer of Vijadiya village. He grows cumin since the five years. Mostly he used the local available seed before the contact of KVK. Due to the high infestation of disease the cost of cultivation becomes very high. He comes with contact with KVK and one FLD conducted at his field during year-2007-08. The Guj.Cumin-4 performed better yield and shows higher disease resistance as compaired to local variety. He again ask to provide the seed of Guj.cumin-4 variety during year 2008-09 and an FLD is also conducted at his farm to follow up the programme.

IMPACT: The yield data of two consecutive year i.e. 2007-08 & 2008-09 the Guj.cumin-4 performed higher yield over the local variety. The average yield was enhancing approximately 10 % over the local variety, the yield of new variety demonstrated automatically shows the economic gain of the farmer. During the field day and various training programmes the farmer told to other farmers of the village about the advantages of the Guj.cumin-4 variety that it is a wilt resistance and higher yielder than local variety. It results that almost the all farmers of the village were aware about this variety and villagers were agree to grow it in coming year.

#### 3) Income generation from candle making:

#### Background:

Mrs Janakben Sankarbhai Satvara a farmwoman of village Doliya, Ta: Sayala, Dist: Surendranagar is doing farming for income generation and that is the only source for her family. She is also doing labor work for other farmers land but i.e. only during monsoon season. She has less land of her own for farming and so less income for survival. She had taken training in Krishi Vigyan Kendra for preparation of Candle. She is started preparing homemade candle and started supply to the whole seller at a near by city and also sale some in her own village. Now she is earning extra money for home and using her free time for useful purpose. She has started this just before few months but her small gruh ukhoyg is now getting some extra order.

Impact: Income generation

Employment generation: Yes

#### 4) Cultivation of New Mustard variety (GM-2)

#### Background:

Mr.Keharbhai HarjiBhai Jambukiya is the farmer of Doliya village of Sayala Taluka, District Surendranagar. He is a progressive farmer and regularly in touch with KVK, Nana-Kandhasar. Previously he was cultivating Wheat and Cumin crop. After coming in contact with the scientist of KVK, Nana -Kandhsar he cultivated the improved and recently release variety of mustard (Gujarat Mustard – 2) as a Front Line Demonstration and harvested good yield (23.75 Q/ha) as compared to local one (14.69 Q/ha) during Rabi 2008-09. With introduction of new variety, he got high additional net return.

Intervention:

**Process:** 

Technology:

------

#### Impact:

This variety GM-2 will increase the production of Mustard from 14.69 to 23.75 Q/ha which will improve the economic condition of farmers of Saurashtra area

#### Horizontal spread:

during the field day organize at the field more farmer were contacted and seen the standing crop performance at the field. he discussion with the village farmer. the area of mustard was increase and more demanding of seed.

#### Economic gains:

#### Employment generation:

#### 5) Additional Income generating from Prawn cultivation

#### Background:

Mr. Nathbhai Somabhai sanghani is a progress farmer of Moti Moladi village of Chotila Taluka, District Surendranagar. He is BE in agriculture. They are about 30 members in joint family of six brothers. He has 8 ha. Land. The field is much undulated due to hilly region. Initially he leveled his field in size of terracing and starts to grow field crops. He also constructed a pacca pond of the size of 60x60x22' for the irrigation purpose. but could not generated much more income from the farm. he has some milch animals for fulfill the family demand. He represents as a SAC member of the KVK -Nana-Kandhasar. hence he keeps regularle touch with KVK. A long discussion with the KVK Scientists an Innovative suggestion of Prawn culture provided by Dr. R.M. Javia Programme Co ordinator considering his resource availability. After time he started the new enterprises at previously constructed pond. Initially he buy about 30000 seeds of prawn. he sold them after attain the weight of average 800gm to 1.00kg per Prawn at price of 30/kg, he told that there is more profit along with farming there is Extra income of Rs.2 lacs to 2.5lacs from adopting the enterprise.

#### Intervention:

**Process:** 

Technology:

# 3.8. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

#### 1. Method of sowing (Row sowing of cumin):

Cumin is highly remunerative as compared to other spice crops. In Surendranagar district the area of cumin is increasing due to suitable climatic condition of the district. For successful cultivation of cumin dry and cool climate is most favorable, hence Surendranagar district is suited to its cultivation.

During PRA survey and various field diagnostic visits, it was found that most of the farmers were adopted broad casting method for sowing of cumin. After discussing with all the Subject Matter Specialists of the Krishi Vigyan Kendra under the chairmanship of Dr. R. M. Javia, Programme coordinator, a field experiment on cumin was conducted at the Krishi Vigyan Kendra. The plot is divided into two halves, one for farmer's practice and other for row sowing i.e. for improved practice. All the component of production technologies keeps same. During the initial stage of germination, the germination occurs very well in row sowing as compare to local check. The growth parameters were also good in improved practices than the check. It was found that heavy attack of powdery mildew occur in dense populated farmer's practices plot as compared to improved practices plot. The yield of the crop was also fluctuated. As a result we found that the row sowing method is more suitable for cumin sowing rather than broad casting method.

- 2. Use of *Tricoderma harzianum* against stem rot disease of groundnut.
- 3. Cotton Stalk Shredder
- 4. Cotton Stalk Puller
- 5. Tractor mounted spryer
- 6. Minimizing the Fertilizer and Maximizing organic manure in Cotton crop
- 7. IPM in Cotton

# 3.9 Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

	Crop	ITK Practiced	Purpose of ITK
1	Cotton	Cow urine + Dhatura + Desi Aakada boiled and their boiled extract sprays on cotton crop to control the sucking pest.	To control sucking pest.
2	Black gram	Uses of Mehandi powdar and Black gram for minimize the repeat breeder (Uthalo)	To minimize repeat breeder
3	Cattle	For the control of H.S. disease (Locally called Humaro), Kalthi pulse used in feeding	To control H.S. disease
4	Cotton	Boiled mixture of neem oil (500 gms), Aelovera (4 kg), tobacco (500 gms)& water (20 lit) used to control the heleothis, pink boll worm, semi looper	To control the heleothis, pink boll worm, semi looper
5	Wheat	Use of cactus leaves & fruits to control the termites	To control termites
6	Cumin	For the control of powdery mildew in cumin, boiled extract of 3 kg leaves of Piludi + 20 lit water spray on cumin	To control powdery mildew
7	Castor	Milk of cactus is used for the control of stem rot in castor	To control stem rot
8	Cotton	Fermented bajra floor (Bajra floor dig in heap of gobber for 10 days) used for the control of different larvae in Cotton	To control different larvae
9	Pulses	Ash powder is used to preserve the pulses.	For the storage
10	Grain	Neem leaves are used to store pulses as well as grains.	For the storage
11	Child care	To cure cough and cold in children, ajwain seed or nagarvel leaf should be used. Those are applying on chest and give hot towel treatment to child.	Child care
12	Child care	To cure dehydration, jaggery water is given to child	Child care

### Indicate the specific training need analysis tools / methodology followed for

#### \* Identification of courses for farmers/farm women:

o Training for value addition in groundnut and pulse

#### \* Rural Youth:

- o Care and maintenance of farm implements.
- o Safe use of agro chemicals.
- o Organic farming.

#### \* Inservice personnel:

o Pre seasonal training on kharif and rabi crops management

#### 3.11 Field activities

Number of villages adopted : 14
 No. of farm families selected : 140

\* No. of survey/PRA conducted : 1 PRA, 1 Bench Mark Survey

#### 3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Not Established

1. Year of establishment : Not Established

2. List of equipments purchased with amount : --

Sr. No.	Name of the Equipment	me of the Equipment Qty.			

#### 3. Details of samples analyzed so far

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples				
Water Samples				
Total				

#### 4. IMPACT

#### 4.1 Impact of KVK activities

Name of specific	No. of	% of	Change in income (Rs.)			
technology/skill transferred	participants	adoption	Before (Rs./Unit)	After (Rs./Unit)		
Guj.Cumin-4	40	5	48000	53500		
GW-366	35	15	47000	51000		
Use of Trichoderma in groundnut	25	32	28400	33200		

#### 4.2. Cases of large scale adoption:

Sr. No.	Thematic Area*	<b>&amp;</b>		Horizontal spread of technology			
			methods suggested to the Extension system	No. of villages	No. of farmers	Area in ha	
1	Dry farming	Latest recommended variety	Field Day, FLD, Training &	14	1500		
		GG-20 (G'nut)	Krushi Mahotsav-				
		Guj. Til-2 (Sesamum)	2008				
		Guj. Greengram-4					
		Guj.Musrard-3 (Mustard)					
		Guj.Cumin-4 (Cumin)					
		GW – 366 (Wheat)					
2	Animal husbandry	Vaccination	Night meeting, training, treatment camp	4			

# 4.3 Details of impact analysis of KVK activities carried out during the reporting period: Under progress

#### 5. LINKAGES

#### 5.1 Functional linkage with different organizations

Name of organization	Nature of linkage
State department of Agriculture - Dy. Director of Agriculture (Extension) - Dy. Director of Horticulture - Dy. Director of Animal husbandry - Dy. Director of Soil Conservation - Dy. Director of Social Forestry Jilla Udyog Kendra Milk Co-operative Society State bank of Saurashtra  Doordarshan Kendra All India Radio	The head of all the organizations are members of Scientific Advisory Committee of KVK and have linkage with different activities of KVK viz., training programmes, farmers day, field days, etc.
AKRSP, Sayala	
NHRDF	
Farmers Training Centre	

### 5.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies

Name of the	Date/ Month	Funding	Amount (Rs.)		
scheme	of initiation	agency	Recurring	Nonrecurring	
RKVY	October-2008	State Govt	4,83,000/-	59,43,300/-	

#### 5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district: No

Sr. No.	Programme	Nature of linkage	Remarks

### 5.4 Give details of programmes implemented under National Horticultural Mission:

Sr. No.	Programme	Nature of linkage	Constraints if any

#### 5.5 Nature of linkage with National Fisheries Development Board: NIL

### 6. PERFORMANCE OF INFRASTRUCTURE IN KVK:

6.1 Performance of demonstration units (other than instructional farm): Demonstration units are under construction

# 6.2 Performance of instructional farm (Crops) including seed production

Sr. No.	Name of crop	Date of sowing	Date of harvest	Area (ha)	Variety	Type of produce	Quantity (Kg)	Seeds Sale (Kg)	Income (Rs.)
1	Castor	02/08/08	Diff Picking	0.25	JI-96	Nucleus	151	46	3,680/-
2	Groundnut	12- 13/06/08	30- 31/10/08	6.0	GG-2	Breeder	6512	5456	2,72,800/
								1056	Farm Use
3	Groundnut	15-	30/10/08	2.0	GG-20	General	2820	840	38,360/-
		17/06/08						300	Farm Use
								300	For FLD
4	Cotton	16/06/08	Diff Picking	1.61	Bt	General	1035	1035	28,721/-
5	Pigeon pea	04/08/08	09/01/09	0.30	BDN-2	General	95	_	
6	Maize	01/12/08	Diff. Cutting	0.12	Local	General	1030	1030	For Fodder Purpose
7	Black gram	03/07/08	23/09/08	0.90	T-9	General	130	130	1,599/-
8	Muth bean	04/07/08	14/10/08	0.40	Guj-2	General	50	50	750/-
9	Cumin	11/11/08	18- 19/02/09	1.0	GC-4	General	215		-
10	Wheat	15/11/08	24- 26/02/09	2.0	GW-496	General	3200		
11	Pearl millet	18/02/09	08/05/09	0.50	GHB- 538	General	740	740	6,660/-
12	Groundnut	12- 14/07/09	_	7.0	GG-2	Breeder	Crop standing		-
13	Groundnut	22 & 27/05/09	_	2.0	GG-20	General	condition		
14	Cotton	04/07/09	_	0.30	Bt	General			
15	Sesamum	14/07/09	_	1.20	Guj.Til-3	General			
16	Black gram	06/07/09	_	1.30	T-9	General			
17	Sorghum	12/06/09		0.10	Local	General			

### 6.3 Performance of production Units (bio-agents / bio pesticides/bio fertilizers etc.,): NIL

Sr.	Name of the	Qty	Amount (Rs.)			
No.	product		Cost of inputs	Gross income	Remarks	
-	-	-	-	-	-	

## 6.4 Performance of instructional farm (livestock and fisheries production) : $\rm NIL$

## 6.5 Rainwater Harvesting Training programme conducted by using rainwater harvesting demonstration unit

Date	Title of the training	Client (PF/		training (PF/ Ö 🖁 including SC/ST		No. of SC/ST Participants			
	course	RY/ EF)	No. Cour	M	F	Т	M	F	Т
02/06 /09	Efficient use of harvested water	PF	1	12	-	12	2	-	2
20/08 /09	Rain water management technology	PF	1	12	-	12	1	-	1

#### 6.6 Utilization of hostel facilities:

Accommodation available (No. of beds): bed & furniture not available

#### 7. FINANCIAL PERFORMANCE

#### 7.1 Details of KVK Bank accounts

	Name of the Bank	Location	A/c Number
a. With Host. Institute	SBI	Junagadh	
b. With KVK (2704 -18)	SBS	Chotila	66002464030
c. With KVK (2076-22)	SBS	Chotila	66002438769

#### 7.2 Utilization of funds under FLD on Oilseed & Pulses (Rs. In Lakhs)

Item	Opening Balance as on	Released by ICAR	Expenditure	Unspent Balance as on 1st april 2009
Item	1 <sup>st</sup> April - 2008	2008-09	2008-09	
Inputs	53119	25000	65144	12975
Ext activities				
TA/DA/POL				
Total	53119	25000	65144	12975

#### 7.3 Utilization of funds under FLD on Cotton (Rs. In Lakhs):

Item	Opening Balance as on	Released by ICAR	Expenditure	Unspent Balance as on 1st april 2009
Item	1st April - 2008	2008-09	2008-09	
Inputs	140000	125000	184551	80449
Ext activities				
TA/DA/POL				
Total	140000	125000	184551	80449

### 7.4 Utilization of KVK funds during the year 2008 -09

	Particulars	Sanctioned	Released	Expenditure			
A. R	A. Recurring Contingencies						
1	Pay & Allowances	36,00,000	36,00,000	28,00,674			
2	Traveling allowances	1,00000	1,00000	51,146			
3	Contingencies	6,20,000	6,20,000	6,19,931			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1,50,000	1,50,000	1,83,778			
В	POL, repair of vehicles, tractor and equipments	90,000	90,000	90,675			
С	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	70,000	70,000	36,222			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	80,000	80,000	63,678			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	1,10,000	1,10,000	87,135			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	60,000	60,000	1,08,046			
G	Training of extension functionaries	40,000	40,000	50,397			
Н	Maintenance of buildings	20,000	20,000	00			
I	Establishment of Soil, Plant & Water Testing Laboratory						
J	Library						
TOT	AL (A)	4,32,0000	4,32,0000	3,47,1751			
1	Works						
2	Office furniture	3,00,000	3,00,000	2,99,870			
3	LCD & Assessories	1,00,000	1,00,000	99,761			
4	Fax machine	20,000	20,000	17,500			
TOTAL (B)		4,20,000	4,20,000	4,17,131			
GRA	AND TOTAL (A+B)	47,40,000	47,40,000	38,88,882			

#### 7.6 Status of revolving fund (Rs.) as on 31st March - 2009

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year
April 2005 to March 2006	1,00,000			1,00,000
April 2006 to March 2007	1,00,000	73,778	15,709	1,58,069
April 2007 to March 2008	1,58,069	3,60,622	3,31,160	1,87,531
April 2008 to March 2009	1,87,531	2,87,137	1,87,888	2,86,780

## 8.0 Please include information which has not been reflected above (write in detail).

#### 8.1 Constraints

(a) Administrative : Nil

(b) Financial : Nil

(c) Technical : Nil

### **Technology Inventory and Activity Chart - III**

S1. No	Technology	Crop/ enterprise	Year of release or recommenda tion of technology	Source of technology	Reference /citation
1.	Variety : GG-20	Groundnut	1991	G.A.U., S.K. Nagar	
2.	Application of Trichoderma against stem rot disease in Groundnut			J.A.U., Junagadh	
3.	Variety : Guj. Sesamum-2	Sesamum	2006	J.A.U., Junagadh	
4	Effect of supplementary irrigation on yield of sesamum			J.A.U., Junagadh	
5	Variety : Guj. Greengram - 4	Greengram	2002	G.A.U., S.K. Nagar	
6	Variety : Guj. Muth - 2	Muth	2005	S.K.A.U., S.K. Nagar	
7	Variety: RCH-2 (Bt)	Cotton			
8	Management of sucking pest in cotton			J.A.U., Junagadh	
9	Variety : Guj. Mustard-3	Mustard	2004	S.K.A.U., S.K. Nagar	
10	Variety : Guj. Gram - 1	Gram			
11	Variety : Guj. Cumin - 4	Cumin	2002	G.A.U., S.K. Nagar	
12	Variety : GW- 366	Wheat	2006	J.A.U., Junagadh	

### 1. Activity Chart

Crop/ Animal/ Enterprise	Problem	Cause	Solution	Activity	Reference of Technology
Groundnut	Low yield		Improved variety	FLD, Training, Field day	G.A.U., S.K. Nagar
	Low yield	Stem rot disease infestation	Application of Trichoderma against stem rot disease in Groundnut	OFT, Training, Field day	J.A.U., Junagadh
Sesamum	Low yield		Improved variety	FLD, Training, Field day	J.A.U., Junagadh
	Low yield	Iritic and irregular rainfall	Effect of supplementary irrigation on yield of sesamum	OFT, Training, Field day	J.A.U., Junagadh
Greengram	Low yield		Improved variety	FLD, Training, Field day	G.A.U., S.K. Nagar
Muth	Low yield		Improved variety	FLD, Training, Field day	S.K.A.U., S.K. Nagar
Cotton	Low yield		Improved variety	FLD, Training, Field day	
	Low yield	Infestation of sucking pest	Management of sucking pest in cotton	OFT, Training, Field day	J.A.U., Junagadh
Mustard	Low yield		Improved variety	FLD, Training, Field day	S.K.A.U., S.K. Nagar
Gram	Low yield		Improved variety	FLD, Training, Field day	
Cumin	Low yield		Improved variety	FLD, Training, Field day	G.A.U., S.K. Nagar
Wheat	Low yield		Improved variety	FLD, Training, Field day	J.A.U., Junagadh